

Trying 31060000009999...Open

DIALOG INFORMATION SERVICES

PLEASE LOGON:

***** HHHHHHHH SSSSSSSS? ### Status: Signing onto Dialog *****

ENTER PASSWORD:

***** HHHHHHHH SSSSSSSS? *****

Welcome to DIALOG

Status: Login successfulDialog level 05.12.03D

Last logoff: 05sep06 13:41:23

Logon file001 29sep06 14:37:06

*** ANNOUNCEMENTS ***

NEW FILES RELEASED

***Verdict Market Research (File 769)

***EMCare (File 45)

***Trademarkscan - South Korea (File 655)

***Regulatory Affairs Journals (File 183)

***Index Chemicus (File 302)

***Inspec (File 202)

RESUMED UPDATING

***File 141, Reader's Guide Abstracts

RELOADS COMPLETED

***File 11, PsycInfo

***File 531, American Business Directory

*** The 2005 reload of the CLAIMS files (Files 340, 341, 942)

is now available online.

DATABASES REMOVED

***File 196, FINDEX

***File 468, Public Opinion Online (POLL)

Chemical Structure Searching now available in Prous Science Drug Data Report (F452), Prous Science Drugs of the Future (F453), IMS R&D Focus (F445/955), Pharmaprojects (F128/928), Beilstein Facts (F390), Derwent Chemistry Resource (F355) and Index Chemicus (File 302).

>>>For the latest news about Dialog products, services, content<<<

>>>and events, please visit What's New from Dialog at <<<

>>><http://www.dialog.com/whatsnew/>. You can find news about<<<

>>>a specific database by entering HELP NEWS <file number>.<<<

* * *

File 1:ERIC 1966-2006/Aug

(c) format only 2006 Dialog

Set	Items	Description
-----	-------	-------------

---	-----	-----
-----	-------	-------

Cost is in DialUnits

?

Terminal set to DLINK

? b 411

29sep06 14:37:22 User294084 Session D7.1

\$0.40 0.114 DialUnits File1

\$0.40 Estimated cost File1

\$0.06 TELNET

\$0.46 Estimated cost this search
\$0.46 Estimated total session cost 0.114 DialUnits

File 411:DIALINDEX(R)

DIALINDEX(R)
(c) 2006 Dialog

*** DIALINDEX search results display in an abbreviated ***
*** format unless you enter the SET DETAIL ON command. ***
? sf all science

>>>"SCIENCE" is not a valid Dialindex category
You have 566 files in your file list.
(To see banners, use SHOW FILES command)

? sf allscience
You have 297 files in your file list.
(To see banners, use SHOW FILES command)

? b 155, 73
29sep06 14:41:54 User294084 Session D7.2
\$0.84 0.318 DialUnits File411
\$0.84 Estimated cost File411
\$1.33 TELNET
\$2.17 Estimated cost this search
\$2.63 Estimated total session cost 0.432 DialUnits

SYSTEM:OS - DIALOG OneSearch
File 155:MEDLINE(R) 1950-2006/Sep 28
(c) format only 2006 Dialog
File 73:EMBASE 1974-2006/Sep 29
(c) 2006 Elsevier B.V.

Set	Items	Description
-----	-------	-------------

---	-----	-----
? b 155, 5. 73, 34, 434		
>>>"5." is not a valid category or service name		
29sep06 14:45:30 User294084 Session D7.3		
\$0.18	0.054 DialUnits	File155
\$0.18	Estimated cost	File155
\$0.60	0.054 DialUnits	File73
\$0.60	Estimated cost	File73
	OneSearch, 2 files,	0.107 DialUnits FileOS
\$1.06	TELNET	
\$1.84	Estimated cost this search	
\$4.47	Estimated total session cost	0.540 DialUnits

SYSTEM:OS - DIALOG OneSearch
File 155:MEDLINE(R) 1950-2006/Sep 28
(c) format only 2006 Dialog
File 73:EMBASE 1974-2006/Sep 29
(c) 2006 Elsevier B.V.
File 34:SciSearch(R) Cited Ref Sci 1990-2006/Sep W4
(c) 2006 The Thomson Corp
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
(c) 2006 The Thomson Corp

Set	Items	Description
-----	-------	-------------

---	-----	-----
? s E. coli		
S1	882	E. COLI

way
to
limited

b biochem
b medicine
b agriculture

? s Escherichia coli
 S2 321744 ESCHERICHIA COLI
 ? s bacterial strain
 S3 24837 BACTERIAL STRAIN
 ? s E. coli strain
 S4 0 E. COLI STRAIN
 ? s Escherichia coli strain
 S5 0 ESCHERICHIA COLI STRAIN
 ? s bacteria e. coli strain
 S6 0 BACTERIA E. COLI STRAIN
 ? s e coli strain
 S7 1 E COLI STRAIN
 ? s escherichia coli
 S8 321744 ESCHERICHIA COLI
 ? s s8 and strain
 321744 S8
 747122 STRAIN
 S9 35981 S8 AND STRAIN
 ? s s1 and s2 and s3 and s7 and s8 and s9
 882 S1
 321744 S2
 24837 S3
 1 S7
 321744 S8
 35981 S9
 S10 0 S1 AND S2 AND S3 AND S7 AND S8 AND S9
 ? s s1 and s2
 882 S1
 321744 S2
 S11 1 S1 AND S2
 ? s s1 and pckA gene
 882 S1
 8 PCKA GENE
 S12 0 S1 AND PCKA GENE
 ? s s2 and pckA gene
 321744 S2
 8 PCKA GENE
 S13 0 S2 AND PCKA GENE
 ? s tdcBC
 S14 0 TDCBC
 ? s tdcB
 S15 64 TDCB
 ? s tdcC
 S16 54 TDCC
 ? s s15 and s16
 64 S15
 54 S16
 S17 6 S15 AND S16
 ? s s17 and operon
 6 S17
 56179 OPERON
 S18 6 S17 AND OPERON
 ? s s18 and pckA
 6 S18
 105 PCKA
 S19 0 S18 AND PCKA
 ? s s18 and knockout plasmid
 6 S18
 0 KNOCKOUT PLASMID
 S20 0 S18 AND KNOCKOUT PLASMID
 ? s s18 knockout? plasmid?

```

>>>Term "KNOCKOUT?" in invalid position
? s s18 and knockout(1w) plasmid(1w)
>>>Possible typing error near end of command
? s s18 and plasmid
      6 S18
      203270 PLASMID
      S21 4 S18 AND PLASMID
? s knockout
      S22 90534 KNOCKOUT
? s knockout plasmid
      S23 0 KNOCKOUT PLASMID
? s plasmid
      S24 203270 PLASMID
? s s22 and s24
      90534 S22
      203270 S24
      S25 834 S22 AND S24
? s s25 and s18
      834 S25
      6 S18
      S26 0 S25 AND S18
? s s25 and pckA
      834 S25
      105 PCKA
      S27 0 S25 AND PCKA
? s s25 and pckA gene
      834 S25
      8 PCKA GENE
      S28 0 S25 AND PCKA GENE
? s s25 and pep carboxylase
      834 S25
      47 PEP CARBOXYLASE
      S29 0 S25 AND PEP CARBOXYLASE
? s phosphoenolpyruvate carboxylase
      S30 1585 PHOSPHOENOLPYRUVATE CARBOXYLASE
? s pepck
      S31 2695 PEPCK
? s s25 and s30
      834 S25
      1585 S30
      S32 0 S25 AND S30
? s s25 and s31
      834 S25
      2695 S31
      S33 0 S25 AND S31
? s s1 and pckA
      882 S1
      105 PCKA
      S34 0 S1 AND PCKA
? s s2
      S35 321744 S2
? LOGOFF
      29sep06 15:02:14 User294084 Session D7.4
      $4.93 1.450 DialUnits File155
      $4.93 Estimated cost File155
      $13.97 1.247 DialUnits File73
      $13.97 Estimated cost File73
      $31.76 1.353 DialUnits File34
      $31.76 Estimated cost File34
      $17.24 0.735 DialUnits File434
      $17.24 Estimated cost File434

```

OneSearch, 4 files, 4.785 DialUnits FileOS
\$4.53 TELNET
\$72.43 Estimated cost this search
\$76.90 Estimated total session cost 5.325 DialUnits

Logoff: level 05.12.03 D 15:02:14

You are now logged offTrying 31060000009999...Open

DIALOG INFORMATION SERVICES

PLEASE LOGON:

***** HHHHHHHH SSSSSSSS? ### Status: Signing onto Dialog *****

ENTER PASSWORD:

***** HHHHHHHH SSSSSSSS? *****

Welcome to DIALOG

Status: Login successfulDialog level 05.12.03D

Last logoff: 29sep06 15:02:14

Logon file001 29sep06 15:12:05

* * *

File 1:ERIC 1966-2006/Aug
(c) format only 2006 Dialog

Set	Items	Description
-----	-------	-------------

---	-----	-----
-----	-------	-------

Cost is in DialUnits

? s pckA and tdcB

Terminal set to DLINK

?

0	PCKA
---	------

0	TDCB
---	------

S1	0	PCKA AND TDCB
----	---	---------------

?

? b 155, 5. 73, 34, 434

>>>"5." is not a valid category or service name

29sep06 15:12:23 User294084 Session D8.1

\$0.76 0.218 DialUnits File1

\$0.76 Estimated cost File1

\$0.26 TELNET

\$1.02 Estimated cost this search

\$1.02 Estimated total session cost 0.218 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 155:MEDLINE(R) 1950-2006/Sep 28

(c) format only 2006 Dialog

File 73:EMBASE 1974-2006/Sep 29

(c) 2006 Elsevier B.V.

File 34:SciSearch(R) Cited Ref Sci 1990-2006/Sep W4

(c) 2006 The Thomson Corp

File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec

(c) 2006 The Thomson Corp

Set	Items	Description
-----	-------	-------------

---	-----	-----
-----	-------	-------

? s pckA

```

      S1      105  PCKA
? s s15 and s30
>>>"S15" does not exist
>>>"S30" does not exist
      0  S15
      0  S30
      S2      0  S15 AND S30
? s phosphoenolpyruvate carboxylase
      S3      1585  PHOSPHOENOLPYRUVATE CARBOXYLASE
? s PEPCK
      S4      2695  PEPCK
? s s1 and s3 and s4
      105  S1
      1585  S3
      2695  S4
      S5      0  S1 AND S3 AND S4
? s s1 and s3
      105  S1
      1585  S3
      S6      1  S1 AND S3
? s s1 and s4
      105  S1
      2695  S4
      S7      14  S1 AND S4
? s E coli
      S8      53  E COLI
? s e. coli
      S9      882  E. COLI
? s escherichia coli
      S10     321744  ESCHERICHIA COLI
? s s6 and s8
      1  S6
      53  S8
      S11     0  S6 AND S8
? s s6 and s9
      1  S6
      882  S9
      S12     0  S6 AND S9
? s s6 and s10
      1  S6
      321744  S10
      S13     1  S6 AND S10
? s s13 and encode(1w) pepck
      1  S13
      76399  ENCODE
      2695  PEPCK
      0  ENCODE(1W) PEPCK
      S14     0  S13 AND ENCODE(1W) PEPCK
? s encode(1w) pepck
      76399  ENCODE
      2695  PEPCK
      S15     0  ENCODE(1W) PEPCK
? s encode(1w) phosphoenolpyruvate carboxylase
      76399  ENCODE
      1585  PHOSPHOENOLPYRUVATE CARBOXYLASE
      S16     0  ENCODE(1W) PHOSPHOENOLPYRUVATE CARBOXYLASE
? t/s6/full
>>>'6' valid only in keyword format
? t s6/full

```

DIALOG(R)File 155:MEDLINE(R)
(c) format only 2006 Dialog. All rts. reserv.

08426340 PMID: 2183002

Physical and genetic analysis of the phosphoenolpyruvate carboxykinase (pckA) locus from Escherichia coli K12.

Goldie H; Medina V

Department of Microbiology, University of Saskatchewan, Saskatoon, Canada.

Molecular & general genetics - MGG (GERMANY, WEST) Jan 1990, 220 (2)
p191-6, ISSN 0026-8925--Print Journal Code: 0125036

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

An 8 kb BamHI fragment of the Escherichia coli K12 chromosome has been cloned which complemented the phenotype of CRM+ **pckA** mutants with inactive phosphoenolpyruvate (PEP) carboxykinase. The **pckA** + clones expressed levels of enzyme activity elevated up to 30-fold and produced a Mr 55,000 product in maxicells, which co-electrophoresed with purified PEP carboxykinase. The cloned fragment expressed the **pckA**, ompR and envZ gene products in maxicells. The order of genes on the chromosome inferred from restriction mapping, was (74 min)... **pckA** envZ ompR...(75 min). Transcription of the **pckA** gene cloned on multicopy plasmids increased in stationary phase and was also regulated by catabolite repression. The transcriptional control region has been located by genetic fusions to the chloramphenicol acetyltransferase (cat) gene and **pckA** was transcribed in the direction of envZ (clockwise direction on the chromosome).

Descriptors: *Carboxy-Lyases--genetics--GE; *Escherichia coli--genetics--GE; * **Phosphoenolpyruvate Carboxylase** --genetics--GE; *Transcription, Genetic; Chloramphenicol O-Acetyltransferase--genetics--GE; Chloramphenicol O-Acetyltransferase--metabolism--ME; Chromosome Mapping; Chromosomes, Bacterial; Cloning, Molecular; Escherichia coli--enzymology--EN; Escherichia coli--growth and development--GD; Genes, Bacterial; Genotype; **Phosphoenolpyruvate Carboxylase** --metabolism--ME; Plasmids; Research Support, Non-U.S. Gov't; Restriction Mapping; Transformation, Bacterial

CAS Registry No.: 0 (Plasmids)

Enzyme No.: EC 2.3.1.28 (Chloramphenicol O-Acetyltransferase); EC 4.1.1. (Carboxy-Lyases); EC 4.1.1.31 (Phosphoenolpyruvate Carboxylase)

Record Date Created: 19900516

Record Date Completed: 19900516

? s s1 and s7

105 S1

14 S7

S17 14 S1 AND S7

? s s1 and s8

105 S1

53 S8

S18 0 S1 AND S8

? s s1 and s9

105 S1

882 S9

S19 0 S1 AND S9

? s s1 and s10

105 S1

321744 S10

S20 32 S1 AND S10

? s s17 and s20

14 S17
32 S20
S21 2 S17 AND S20
? t s21/full

21/9/1 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2006 Dialog. All rts. reserv.

12374312 PMID: 10217755

Molecular and functional characterization of the *Rhodopseudomonas palustris* no. 7 phosphoenolpyruvate carboxykinase gene.

Inui M; Nakata K; Roh J H; Zahn K; Yukawa H
Research Institute of Innovative Technology for the Earth, 9-2,
Kizugawadai, Kizu, Soraku, Kyoto, 619-0292, Japan.

Journal of bacteriology (UNITED STATES) May 1999, 181 (9) p2689-96,
ISSN 0021-9193--Print Journal Code: 2985120R

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS; Toxibib

The **pckA** gene, encoding the gluconeogenic enzyme phosphoenolpyruvate carboxykinase (**PEPCK**), was cloned by PCR amplification from the purple nonsulfur bacterium *Rhodopseudomonas palustris* No. 7. Sequencing of a 2.5-kb chromosomal *Sma*I-*Pst*I fragment containing the structural gene revealed an open reading frame encoding 537 amino acids, homologous to known **pckA** genes. Primer extension analysis identified a transcriptional start site 72 bp upstream of the **pckA** initiation codon and an upstream sequence similar to sigma70 promoters. Studies of a **pckA** -lacZ gene fusion indicated that when cells were grown in minimal media with various carbon sources, such as succinate, malate, pyruvate, lactate, or ethanol, under both anaerobic light and aerobic dark conditions, the **pckA** gene was induced in log phase, irrespective of the carbon source. A *R. palustris* No. 7 **PEPCK** -deficient strain showed growth characteristics identical to those of the wild-type strain either anaerobically in the light or aerobically in the dark when a C4-dicarboxylic acid, such as succinate or malate, was used as a carbon source. These results indicate that in *R. palustris* No. 7, an alternative gluconeogenic pathway may exist in addition to **PEPCK** .

Descriptors: *Genes, Bacterial; *Phosphoenolpyruvate Carboxykinase (ATP) --genetics--GE; **Rhodopseudomonas*--genetics--GE; Amino Acid Sequence; Base Sequence; Cloning, Molecular; Comparative Study; *Escherichia coli* --genetics--GE; Gene Expression; Gluconeogenesis; Models, Biological; Molecular Sequence Data; Mutagenesis, Insertional; Phosphoenolpyruvate Carboxykinase (ATP)--biosynthesis--BI; Recombinant Proteins--biosynthesis --BI; Research Support, Non-U.S. Gov't; *Rhodopseudomonas*--enzymology--EN; Sequence Analysis, DNA; Sequence Homology, Amino Acid; Transcription, Genetic

Molecular Sequence Databank No.: GENBANK/AB015618

CAS Registry No.: 0 (Recombinant Proteins)

Enzyme No.: EC 4.1.1.49 (Phosphoenolpyruvate Carboxykinase (ATP))

Record Date Created: 19990519

Record Date Completed: 19990519

? t s21/free/1-5

21/8/1 (Item 1 from file: 155)
DIALOG(R)File 155:(c) format only 2006 Dialog. All rts. reserv.

12374312 PMID: 10217755

Molecular and functional characterization of the Rhodopseudomonas palustris no. 7 phosphoenolpyruvate carboxykinase gene.

May 1999

Descriptors: *Genes, Bacterial; *Phosphoenolpyruvate Carboxykinase (ATP) --genetics--GE; *Rhodopseudomonas--genetics--GE; Amino Acid Sequence; Base Sequence; Cloning, Molecular; Comparative Study; **Escherichia coli** --genetics--GE; Gene Expression; Gluconeogenesis; Models, Biological; Molecular Sequence Data; Mutagenesis, Insertional; Phosphoenolpyruvate Carboxykinase (ATP)--biosynthesis--BI; Recombinant Proteins--biosynthesis --BI; Research Support, Non-U.S. Gov't; Rhodopseudomonas--enzymology--EN; Sequence Analysis, DNA; Sequence Homology, Amino Acid; Transcription, Genetic

Molecular Sequence Databank No.: GENBANK/AB015618

CAS Registry No.: 0 (Recombinant Proteins)

Enzyme No.: EC 4.1.1.49 (Phosphoenolpyruvate Carboxykinase (ATP))

21/8/2 (Item 1 from file: 73)

07677959 EMBASE No: 1999160059

Molecular and functional characterization of the Rhodopseudomonas palustris no. 7 phosphoenolpyruvate carboxykinase gene

1999

? s s8 and s9 and s10
53 S8
882 S9
321744 S10
S22 0 S8 AND S9 AND S10
? s s8 and exogenous gene
53 S8
5 EXOGENOUS GENE
S23 0 S8 AND EXOGENOUS GENE
? s s9 and exogenous gene
882 S9
5 EXOGENOUS GENE
S24 0 S9 AND EXOGENOUS GENE
? s s10 and exogenous gene
321744 S10
5 EXOGENOUS GENE
S25 0 S10 AND EXOGENOUS GENE
? s tdcB
S26 64 TDCB
? s tdcC
S27 54 TDCC
? s thrA(w) thrB(w) thr(C)
>>>Possible typing error near end of command
? s thrA thrB
S28 0 THRA THRB
? s thrA
S29 155 THRA
? s thrB
S30 310 THRB
? s thrC
S31 82 THRC
? s s29 and s30 and s31
155 S29
310 S30
82 S31
S32 17 S29 AND S30 AND S31
? s s32 and operon
17 S32
56179 OPERON

S33	9	S32 AND OPERON
? s 32 and s8		
	658969	32
	53	S8
S34	2	32 AND S8
? s s32 and s9		
	17	S32
	882	S9
S35	0	S32 AND S9
? s s32 and s10		
	17	S32
	321744	S10
S36	8	S32 AND S10
? s s34 and pckA		
	2	S34
	105	PCKA
S37	0	S34 AND PCKA
? s s35 and pckA		
	0	S35
	105	PCKA
S38	0	S35 AND PCKA
? s s33 and pckA		
	9	S33
	105	PCKA
S39	0	S33 AND PCKA
? s s32 and phosphoenolpyruvate carboxylase		
	17	S32
	0	PHOSOPHOENOLPYRUVATE CARBOXYLASE
S40	0	S32 AND PHOSOPHOENOLPYRUVATE CARBOXYLASE
? s s33 and phosphoenolpyruvate carboxylase		
	9	S33
	0	PHOSOPHOENOLPYRUVATE CARBOXYLASE
S41	0	S33 AND PHOSOPHOENOLPYRUVATE CARBOXYLASE
? s s32 and pepck		
	17	S32
	2695	PEPCK
S42	0	S32 AND PEPCK
? s s33 and pepck		
	9	S33
	2695	PEPCK
S43	0	S33 AND PEPCK
? s s32 and recombinase		
	17	S32
	10630	RECOMBINASE
S44	0	S32 AND RECOMBINASE
? s recombinase		
S45	10630	RECOMBINASE
? s s32 and s45		
	17	S32
	10630	S45
S46	0	S32 AND S45
? s recombinase and FLP and CRE and XerC and XerD		
	10630	RECOMBINASE
	2144	FLP
	15536	CRE
	264	XERC
	250	XERD
S47	4	RECOMBINASE AND FLP AND CRE AND XERC AND XERD
? s s47 and s32		
	4	S47
	17	S32

S48 0 S47 AND S32
 ? s s47 and s33
 4 S47
 9 S33
 S49 0 S47 AND S33
 ? s 47 and phosphoenolpyruvate carboxylase
 386293 47
 1585 PHOSPHOENOLPYRUVATE CARBOXYLASE
 S50 10 47 AND PHOSPHOENOLPYRUVATE CARBOXYLASE
 ? s s47 and tdcB
 4 S47
 64 TDCB
 S51 0 S47 AND TDCB
 ? s s47 and tdcC
 4 S47
 54 TDCC
 S52 0 S47 AND TDCC
 ? s s47 and tdcB gene
 4 S47
 0 TDCB GENE
 S53 0 S47 AND TDCB GENE
 ? s s47 and thrA gene
 4 S47
 18 THRA GENE
 S54 0 S47 AND THRA GENE
 ? s s47 and thrC gene
 4 S47
 3 THRC GENE
 S55 0 S47 AND THRC GENE
 ? s s47 and thrB gene
 4 S47
 6 THRB GENE
 S56 0 S47 AND THRB GENE
 ? s s47 and s8
 4 S47
 53 S8
 S57 0 S47 AND S8
 ? s s47 and s9
 4 S47
 882 S9
 S58 0 S47 AND S9
 ? s s47 and s10
 4 S47
 321744 S10
 S59 1 S47 AND S10
 ? t s59/free/1

59/8/1 (Item 1 from file: 73)
 05708100 EMBASE No: 1994125928
 Conjugative transposition: Tn916 integrase contains two independent DNA
 binding domains that recognize different DNA sequences
 1994
 ? t s59/full

59/9/1 (Item 1 from file: 73)
 DIALOG(R)File 73:EMBASE
 (c) 2006 Elsevier B.V. All rts. reserv.

05708100 EMBASE No: 1994125928
 Conjugative transposition: Tn916 integrase contains two independent DNA
 binding domains that recognize different DNA sequences

Lu F.; Churchward G.
Dept of Microbiology and Immunology, Emory University, Atlanta, GA 30322
United States
EMBO Journal (EMBO J.) (United Kingdom) 1994, 13/7 (1541-1548)
CODEN: EMJOD ISSN: 0261-4189
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Transposition of the conjugative transposon Tn916 requires the activity of a protein, called Int, which is related to members of the integrase family of site-specific recombinases. This family includes phage lambda integrase as well as the **Cre**, **FLP** and **XerC / XerD** recombinases. Different proteins, consisting of fragments of Tn916 Int protein fused to the C-terminal end of maltose binding protein (MBP) were purified from *Escherichia coli*. DNase I protection experiments showed that MBP-INT proteins containing the C-terminal end of Int bound to the ends of the transposon and adjacent plasmid DNA. MBP-INT proteins containing the N-terminal end of Int bound to sequences within the transposon close to each end. Competition binding experiments showed that the sites recognized by the C- and N-terminal regions of Int did not compete with each other for binding to MBP-INT. We suggest that Tn916 and related conjugative transposons are unique among members of the integrase family of site-specific recombination systems because the presence of two DNA binding domains in the Int protein might allow Int to bridge recombining sites, and this bridging seems to be the sole mechanism ensuring that only correctly aligned molecules undergo recombination.

DRUG DESCRIPTORS:

* **recombinase** --endogenous compound--ec
deoxyribonuclease i; maltose binding protein; plasmid dna

MEDICAL DESCRIPTORS:

*bacterium conjugation; *dna integration; *protein dna binding; *transposon amino terminal sequence; article; bacteriophage lambda; binding competition; carboxy terminal sequence; dna sequence; **escherichia coli**; genetic recombination; nonhuman; priority journal; protein protein interaction
CAS REGISTRY NO.: 9003-98-9 (deoxyribonuclease i)

SECTION HEADINGS:

004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
029 Clinical and Experimental Biochemistry
? t s50/free/1-10

50/8/1 (Item 1 from file: 155)
DIALOG(R) File 155:(c) format only 2006 Dialog. All rts. reserv.

15029325 PMID: 15310068

Role of sulphur availability on cadmium-induced changes of nitrogen and sulphur metabolism in maize (*Zea mays* L.) leaves.

Jul 2004

Descriptors: *Cadmium--toxicity--TO; *Nitrogen--metabolism--ME; *Plant Leaves--enzymology--EN; *Sulfur Compounds--metabolism--ME; *Zea mays --enzymology--EN; Adaptation, Physiological--drug effects--DE; Adaptation, Physiological--physiology--PH; Cadmium--administration and dosage--AD; Chelating Agents--metabolism--ME; Cysteine Synthase--metabolism--ME; Glutamate Dehydrogenase--metabolism--ME; Glutamate-Ammonia Ligase --metabolism--ME; Metalloproteins--biosynthesis--BI; Nitrate Reductase (NADH); Nitrate Reductases--metabolism--ME; **Phosphoenolpyruvate Carboxylase** --metabolism--ME; Plant Leaves--chemistry--CH; Plant Leaves --drug effects--DE; Research Support, Non-U.S. Gov't; Sulfate Adenylyltransferase--metabolism--ME; Sulfates--pharmacology--PD; Zea mays --chemistry--CH; Zea mays--drug effects--DE

CAS Registry No.: 0 (Chelating Agents); 0 (Metalloproteins); 0

(Sulfates); 0 (Sulfur Compounds); 7440-43-9 (Cadmium); 7727-37-9 (Nitrogen); 98726-08-0 (phytochelatin)
Enzyme No.: EC 1.4.1.2 (Glutamate Dehydrogenase); EC 1.7.- (Nitrate Reductases); EC 1.7.1.1 (Nitrate Reductase (NADH)); EC 2.5.1. 47 (Cysteine Synthase); EC 2.7.7.4 (Sulfate Adenylyltransferase); EC 4.1.1.31 (Phosphoenolpyruvate Carboxylase); EC 6.3.1.2 (Glutamate-Ammonia Ligase)

50/8/2 (Item 2 from file: 155)

DIALOG(R)File 155:(c) format only 2006 Dialog. All rts. reserv.

06288941 PMID: 6673422

Phosphoenolpyruvate carboxylase from the roots of yellow lupin (*Lupinus luteus*).

1983

Descriptors: *Carboxy-Lyases--isolation and purification--IP; ***Phosphoenolpyruvate Carboxylase** --isolation and purification--IP; *Plants --enzymology--EN; Comparative Study; **Phosphoenolpyruvate Carboxylase** --antagonists and inhibitors--AI; **Phosphoenolpyruvate Carboxylase** --metabolism--ME

Enzyme No.: EC 4.1.1. (Carboxy-Lyases); EC 4.1.1.31 (Phosphoenolpyruvate Carboxylase)

50/8/3 (Item 1 from file: 73)

10557740 EMBASE No: 2000021403

Elucidation of enzymes in fermentation pathways used by *Clostridium thermosuccinogenes* growing on inulin

2000

50/8/4 (Item 2 from file: 73)

06182160 EMBASE No: 1995216361

Identification of carboxylation enzymes and characterization of a novel four-subunit pyruvate:flavodoxin oxidoreductase from *Helicobacter pylori*

1995

50/8/5 (Item 3 from file: 73)

05970453 EMBASE No: 1994377115

Potential metabolic limitations in lysine production by *Corynebacterium glutamicum* as revealed by metabolic network analysis

1994

50/8/6 (Item 1 from file: 34)

DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

12375581 Genuine Article#: 758RG Number of References: 38

Title: Effect of nitrogen supply on leaf traits related to photosynthesis during grain filling in two maize genotypes with different N efficiency (ABSTRACT AVAILABLE)

Publication date: 20031200

Journal Subject Category: AGRONOMY; PLANT SCIENCES; AGRICULTURE, SOIL SCIENCE

Descriptors--Author Keywords: carbohydrate accumulation ; genotype ; maize ; N efficiency ; photosynthesis

Identifiers--Keyword Plus(R): RIBULOSE-1,5-BISPHOSPHATE CARBOXYLASE OXYGENASE; FIELD-GROWN MAIZE; **PHOSPHOENOLPYRUVATE CARBOXYLASE**;

ROOT-GROWTH; LEAVES; PRODUCTIVITY; EXPRESSION; DEFICIENCY; NUTRITION;
SORGHUM

50/8/7 (Item 2 from file: 34)

DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

08215327 Genuine Article#: 258HA Number of References: 48

Title: His-Asp phosphotransfer possibly involved in the nitrogen signal transduction mediated by cytokinin in maize: molecular cloning of cDNAs for two-component regulatory factors and demonstration of phosphotransfer activity in vitro (ABSTRACT AVAILABLE)

Publication date: 19991100

Journal Subject Category: PLANT SCIENCES; BIOCHEMISTRY & MOLECULAR BIOLOGY

Descriptors--Author Keywords: cytokinin ; His-Asp phosphorelay ; histidine-containing phosphotransfer domain ; nitrogen signal transduction ; response regulator ; Zea mays

Identifiers--KeyWord Plus(R): ETHYLENE RESPONSE PATHWAY; MAP KINASE CASCADE; URTICA-DIOICA L; ARABIDOPSIS-THALIANA; HISTIDINE KINASE; **PHOSPHOENOLPYRUVATE CARBOXYLASE**; MULTISTEP PHOSPHORELAY; 2-COMPONENT SYSTEM; ESCHERICHIA-COLI; GENE-EXPRESSION

50/8/8 (Item 3 from file: 34)

DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

06316445 Genuine Article#: YH941 Number of References: 31

Title: Characterisation of two cDNAs encoding carbonic anhydrase in maize leaves (ABSTRACT AVAILABLE)

Publication date: 19970000

Journal Subject Category: PLANT SCIENCES

Identifiers--KeyWord Plus(R): SITE-DIRECTED MUTAGENESIS; **PHOSPHOENOLPYRUVATE CARBOXYLASE**; NUCLEOTIDE-SEQUENCE; DEPENDENT ACCUMULATION; ARABIDOPSIS-THALIANA; MESSENGER-RNAS; C-4 PLANTS; EXPRESSION; PEA; STEP

Research Fronts: 95-5061 002 (STRUCTURAL GENE; GLTC-DEPENDENT REGULATION OF BACILLUS-SUBTILIS GLUTAMATE SYNTHASE EXPRESSION; ARABIDOPSIS TYPE-1 PROTEIN PHOSPHATASE)

95-3190 001 (INCREASED ABUNDANCE OF SPECIFIC SKELETAL-MUSCLE PROTEIN-TYROSINE PHOSPHATASES; ALPHA-B-CRYSTALLIN EXPRESSION)

95-7181 001 (EXPRESSION OF THE ARABIDOPSIS-THALIANA ACONITASE GENE; RICE CDNA SEQUENCES ENCODING PUTATIVE CALCIUM-DEPENDENT PROTEIN-KINASES)

50/8/9 (Item 4 from file: 34)

DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

03587828 Genuine Article#: PP399 Number of References: 31

Title: LIGHT, CHLOROPHYLL, CARBOXYLASE ACTIVITY AND CO2 FIXATION AT VARIOUS DEPTHS IN THE CHLORENCYMA OF OPUNTIA-FICUS-INDICA (L) MILLER UNDER CURRENT AND ELEVATED CO2 (Abstract Available)

Journal Subject Category: PLANT SCIENCES

Descriptors--Author Keywords: CO2 UPTAKE ; LIGHT DISTRIBUTION ; OPUNTIA FICUS-INDICA (PRICKLY PEAR CACTUS) ; **PHOSPHOENOLPYRUVATE CARBOXYLASE** ; RUBISCO

Identifiers--KeyWords Plus: CRASSULACEAN ACID METABOLISM; PHOTOSYNTHETIC PROPERTIES; PALISADE TISSUE; PLANTS; LEAF; GRADIENTS; LEAVES; REFLECTANCE; ENVIRONMENT; TRANSMITTANCE

Research Fronts: 92-2312 001 (LATERAL ROOTS OF 2 DESERT SUCCULENTS;

HYDRAULIC CONDUCTIVITY; CRASSULACEAN ACID METABOLISM; DRYING SOIL; STEM
WATER STORAGE; C-4 PLANTS)
92-2666 001 (LEAF NITROGEN PARTITIONING; LIGHT RESPONSE; PHOTOSYNTHETIC
CAPACITY; ELEVATED CO₂; LONG-TERM EXPOSURE; HEALTHY RED SPRUCE; CARBON
GAIN)
92-6718 001 (C-4 PHOTOSYNTHESIS; FRUITS OF CAPSICUM-ANNUUM-L;
IRON-DEFICIENCY STRESS RESPONSE)

50/8/10 (Item 5 from file: 34)

DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

02192033 Genuine Article#: KJ288 Number of References: 55

**Title: MOLECULAR-CLONING AND EXPRESSION OF CHLOROPLAST NADP-MALATE
DEHYDROGENASE DURING CRASSULACEAN ACID METABOLISM INDUCTION BY SALT
STRESS** (Abstract Available)

Journal Subject Category: PLANT SCIENCES

Descriptors--Author Keywords: SALT STRESS ; CRASSULACEAN ACID METABOLISM
(CAM) ; FACULTATIVE HALOPHYTE ; CHLOROPLAST ; NADP-MALATE DEHYDROGENASE
(EC-1.1.1.82) ; MESEMBRYANTHEMUM-CRYSTALLINUM

Identifiers--KeyWords Plus: MESEMBRYANTHEMUM-CRYSTALLINUM L; COMMON ICE
PLANT; KALANCHOE-DAIGREMONTIANA; CARBON METABOLISM; MESSENGER-RNA;
PHOSPHOENOLPYRUVATE CARBOXYLASE; ENZYME REGULATION; SEQUENCE; LIGHT;
DNA

Research Fronts: 91-4817 001 (LIPASE GENE; CDNA FOR STIMULATORY GDP/GTP
EXCHANGE PROTEIN; EXPRESSION OF MESSENGER-RNA)

91-5382 001 (DNA PROBE; T-CELL RECEPTOR GENES; CHROMOSOMAL
LOCALIZATION; GENOMIC SOUTHERN ANALYSIS)

91-6470 001 (MAJOR NUCLEOCAPSID PROTEIN GENE; VARIABLE DOMAINS;
ANABAENA SP STRAIN PCC-7120)

91-6980 001 (CHLOROPLAST IMPORTED PROTEINS; YEAST MITOCHONDRIAL ATP
SYNTHASE; MOLECULAR-CLONING OF CDNA; THYLAKOID LUMEN; DEDUCED SEQUENCE;
NUCLEAR GENE)

? t s47/free/1-4

47/8/1 (Item 1 from file: 73)

05708100 EMBASE No: 1994125928

**Conjugative transposition: Tn916 integrase contains two independent DNA
binding domains that recognize different DNA sequences**
1994

47/8/2 (Item 1 from file: 34)

DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

12816397 Genuine Article#: 822SZ Number of References: 35

**Title: Recombination of hybrid target sites by binary combinations of Flp
variants: Mutations that foster interprotomer collaboration and enlarge
substrate tolerance** (ABSTRACT AVAILABLE)

Publication date: 20040528

Journal Subject Category: BIOCHEMISTRY & MOLECULAR BIOLOGY

Descriptors--Author Keywords: DNA-protein interactions ; Flp ; genome
engineering ; molecular evolution ; site-specific recombination

Identifiers--KeyWord Plus(R): **CRE RECOMBINASE** ; CLEAVES DNA; PROTEIN;
SPECIFICITY; **XERC**; MOLSCRIPT; EVOLUTION; TYROSINE; SWITCH; TRANS

47/8/3 (Item 2 from file: 34)

DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

10008590 Genuine Article#: 473MF Number of References: 28
Title: Switching catalytic activity in the XerCD site-specific recombination machine (ABSTRACT AVAILABLE)
Publication date: 20010907
Journal Subject Category: BIOCHEMISTRY & MOLECULAR BIOLOGY
Descriptors--Author Keywords: site-specific recombination ; tyrosine **recombinase** ; XerCD ; Holliday junction ; coordinated catalysis
Identifiers--KeyWord Plus(R): HOLLIDAY JUNCTION INTERMEDIATE; CRYSTAL-STRUCTURE; ESCHERICHIA-COLI; **FLP RECOMBINASE** ; IN-VITRO; **CRE**; DNA; PROTEIN; SEGREGATION; RESOLUTION

47/8/4 (Item 3 from file: 34)
DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

03116383 Genuine Article#: NF928 Number of References: 39
Title: CONJUGATIVE TRANSPOSITION - TN916 INTEGRASE CONTAINS 2 INDEPENDENT DNA-BINDING DOMAINS THAT RECOGNIZE DIFFERENT DNA-SEQUENCES (Abstract Available)
Journal Subject Category: BIOCHEMISTRY & MOLECULAR BIOLOGY
Descriptors--Author Keywords: CONJUGATIVE TRANSPOSITION ; DNA-PROTEIN INTERACTION ; INTEGRASE PROTEIN ; SITE-SPECIFIC RECOMBINATION
Identifiers--KeyWords Plus: SITE-SPECIFIC RECOMBINATION; STREPTOCOCCUS-FAECALIS; **FLP RECOMBINASE** ; RNA-POLYMERASE; HOST FACTOR; PROTEIN; ORDER; DIRECTIONALITY; RESISTANCE; INSERTION
Research Fronts: 92-8077 001 (EXPRESSION OF A RECOMBINANT GENE; VIRAL ASSEMBLY PROTEIN; VACCINIA VIRUS VECTORS; DNA-BINDING INVITRO; XENOPUS OOCYTES; DIFFERENT EXTRACELLULAR DOMAINS)
? t s36/free/1-8

36/8/1 (Item 1 from file: 155)
DIALOG(R)File 155:(c) format only 2006 Dialog. All rts. reserv.

15209098 PMID: 15271780
A probabilistic measure for alignment-free sequence comparison.
Dec 12 2004
Descriptors: *Algorithms; *Models, Genetic; *Models, Statistical; *Sequence Alignment--methods--MT; *Sequence Analysis, DNA--methods--MT; *Sequence Homology, Nucleic Acid; Comparative Study; Computer Simulation; **Escherichia coli** --genetics--GE; Operon--genetics--GE; Shigella flexneri --genetics--GE; Threonine--genetics--GE
CAS Registry No.: 72-19-5 (Threonine)

36/8/2 (Item 2 from file: 155)
DIALOG(R)File 155:(c) format only 2006 Dialog. All rts. reserv.

13199662 PMID: 11331237
Analysis of genomic sequences by Chaos Game Representation.
May 2001
Descriptors: *Algorithms; *Genome; *Nonlinear Dynamics; *Sequence Analysis, DNA--statistics and numerical data--SN; Base Sequence; DNA, Bacterial--genetics--GE; **Escherichia coli** --genetics--GE; Game Theory; Genome, Bacterial; Research Support, Non-U.S. Gov't; Research Support, U.S. Gov't, Non-P.H.S.; Sequence Alignment--statistics and numerical data--SN; Threonine--genetics--GE
CAS Registry No.: 0 (DNA, Bacterial); 72-19-5 (Threonine)

36/8/3 (Item 3 from file: 155)

DIALOG(R)File 155:(c) format only 2006 Dialog. All rts. reserv.

08069910 PMID: 2542227

Translational coupling in the threonine operon of Escherichia coli K-12.

Jun 1989

Descriptors: *Carbon-Oxygen Lyases; * **Escherichia coli** --genetics--GE; *Phosphotransferases (Alcohol Group Acceptor); *Threonine--genetics--GE; Cloning, Molecular; Gene Expression Regulation; Genes, Bacterial; Homoserine Dehydrogenase--genetics--GE; Lyases--genetics--GE; Molecular Weight; Operon; Phosphotransferases--genetics--GE; Protein Biosynthesis; Recombinant Fusion Proteins--genetics--GE

CAS Registry No.: 0 (Recombinant Fusion Proteins); 72-19-5 (Threonine)
Enzyme No.: EC 1.1.1.3 (Homoserine Dehydrogenase); EC 2.7 (Phosphotransferases); EC 2.7.1 (Phosphotransferases (Alcohol Group Acceptor)); EC 2.7.1.39 (homoserine kinase); EC 4. (Lyases); EC 4.2 (Carbon-Oxygen Lyases); EC 4.2.99.2 (threonine synthase)

36/8/4 (Item 4 from file: 155)

DIALOG(R)File 155:(c) format only 2006 Dialog. All rts. reserv.

07355672 PMID: 3035340

Cloning and expression in Escherichia coli of the homoserine kinase (thrB) gene from Brevibacterium lactofermentum.

Mar 1987

Descriptors: *Brevibacterium--genetics--GE; *Cloning, Molecular; * **Escherichia coli** --genetics--GE; *Genes; *Genes, Bacterial; *Phosphotransferases--genetics--GE; *Phosphotransferases (Alcohol Group Acceptor); *Transcription, Genetic; Brevibacterium--enzymology--EN; DNA Restriction Enzymes; Genotype; Nucleic Acid Hybridization; Plasmids; Research Support, Non-U.S. Gov't

CAS Registry No.: 0 (Plasmids)
Enzyme No.: EC 2.7 (Phosphotransferases); EC 2.7.1 (Phosphotransferases (Alcohol Group Acceptor)); EC 2.7.1.39 (homoserine kinase); EC 3.1.21 (DNA Restriction Enzymes)

36/8/5 (Item 5 from file: 155)

DIALOG(R)File 155:(c) format only 2006 Dialog. All rts. reserv.

05472866 PMID: 6259626

Nucleotide sequence of the thrB gene of E. coli, and its two adjacent regions; the thrAB and thrBC junctions.

Jan 24 1981

Descriptors: ***Escherichia coli** --genetics--GE; *Genes; *Phosphotransferases (Alcohol Group Acceptor); Amino Acid Sequence; Base Composition; Base Sequence; Codon; DNA Restriction Enzymes; Genetic Code; Phosphotransferases--genetics--GE; Research Support, Non-U.S. Gov't; Transduction, Genetic

Molecular Sequence Databank No.: GENBANK/J01706; GENBANK/J01707; GENBANK/J01708; GENBANK/J01709; GENBANK/V00360; GENBANK/X00092

CAS Registry No.: 0 (Codon)
Enzyme No.: EC 2.7 (Phosphotransferases); EC 2.7.1 (Phosphotransferases (Alcohol Group Acceptor)); EC 2.7.1.39 (homoserine kinase); EC 3.1.21 (DNA Restriction Enzymes)

36/8/6 (Item 1 from file: 73)

11163022 EMBASE No: 2001178442

Analysis of genomic sequences by Chaos Game Representation

2001

36/8/7 (Item 2 from file: 73)

03976754 EMBASE No: 1989145750

Translational coupling in the threonine operon of *Escherichia coli* K-12
1989

36/8/8 (Item 3 from file: 73)

00166313 EMBASE No: 1974156437

Mapping of the structural genes of the three aspartokinases and of the
two homoserine dehydrogenases of *Escherichia coli* K 12

1974

? t s32/free/1-17

32/8/1 (Item 1 from file: 155)

DIALOG(R)File 155:(c) format only 2006 Dialog. All rts. reserv.

15209098 PMID: 15271780

A probabilistic measure for alignment-free sequence comparison.

Dec 12 2004

Descriptors: *Algorithms; *Models, Genetic; *Models, Statistical;
*Sequence Alignment--methods--MT; *Sequence Analysis, DNA--methods--MT;
*Sequence Homology, Nucleic Acid; Comparative Study; Computer Simulation;
Escherichia coli--genetics--GE; Operon--genetics--GE; *Shigella flexneri*
--genetics--GE; Threonine--genetics--GE

CAS Registry No.: 72-19-5 (Threonine)

32/8/2 (Item 2 from file: 155)

DIALOG(R)File 155:(c) format only 2006 Dialog. All rts. reserv.

14878432 PMID: 15133108

Role of homoserine and threonine pathway intermediates as precursors for
the biosynthesis of aminoethoxyvinylglycine in *Streptomyces* sp. NRRL 5331.

May 2004

Descriptors: *Glycine--analogs and derivatives--AA; *Glycine
--biosynthesis--BI; *Homoserine--metabolism--ME; *Streptomyces--enzymology
--EN; *Threonine--metabolism--ME; Carbon-Oxygen Lyases--genetics--GE;
Carbon-Oxygen Lyases--metabolism--ME; Gene Expression Regulation,
Bacterial; Homoserine Dehydrogenase--genetics--GE; Homoserine
Dehydrogenase--metabolism--ME; Phosphotransferases (Alcohol Group Acceptor)
--genetics--GE; Phosphotransferases (Alcohol Group Acceptor)--metabolism
--ME; Research Support, Non-U.S. Gov't; Streptomyces--genetics--GE;
Streptomyces--metabolism--ME

CAS Registry No.: 49669-74-1 (aminoethoxyvinylglycine); 498-19-1
(Homoserine); 56-40-6 (Glycine); 72-19-5 (Threonine)

Enzyme No.: EC 1.1.1.3 (Homoserine Dehydrogenase); EC 2.7.1
(Phosphotransferases (Alcohol Group Acceptor)); EC 2.7.1.39 (homoserine
kinase); EC 4.2 (Carbon-Oxygen Lyases); EC 4.2.99.2 (threonine synthase)

32/8/3 (Item 3 from file: 155)

DIALOG(R)File 155:(c) format only 2006 Dialog. All rts. reserv.

13199662 PMID: 11331237

Analysis of genomic sequences by Chaos Game Representation.

May 2001

Descriptors: *Algorithms; *Genome; *Nonlinear Dynamics; *Sequence

Analysis, DNA--statistics and numerical data--SN; Base Sequence; DNA, Bacterial--genetics--GE; Escherichia coli--genetics--GE; Game Theory; Genome, Bacterial; Research Support, Non-U.S. Gov't; Research Support, U.S. Gov't, Non-P.H.S.; Sequence Alignment--statistics and numerical data--SN; Threonine--genetics--GE

CAS Registry No.: 0 (DNA, Bacterial); 72-19-5 (Threonine)

32/8/4 (Item 4 from file: 155)

DIALOG(R)File 155:(c) format only 2006 Dialog. All rts. reserv.

09534477 PMID: 8423151

Nucleotide sequence of the Serratia marcescens threonine operon and analysis of the threonine operon mutations which alter feedback inhibition of both aspartokinase I and homoserine dehydrogenase I.

Feb 1993

Descriptors: *Aspartate Kinase--genetics--GE; *Homoserine Dehydrogenase--genetics--GE; *Operon; *Serratia marcescens--genetics--GE; *Threonine--metabolism--ME; Allosteric Regulation; Amino Acid Sequence; Base Sequence; Cloning, Molecular; Comparative Study; DNA, Bacterial--genetics--GE; Feedback; Gene Expression; Genes, Bacterial; Molecular Sequence Data; Mutation; Promoter Regions (Genetics); RNA, Messenger--genetics--GE; Sequence Alignment; Threonine--pharmacology--PD; Transcription, Genetic
Molecular Sequence Databank No.: GENBANK/D10385; GENBANK/D10386; GENBANK/D10387; GENBANK/X60821

CAS Registry No.: 0 (DNA, Bacterial); 0 (RNA, Messenger); 72-19-5 (Threonine)

Enzyme No.: EC 1.1.1.3 (Homoserine Dehydrogenase); EC 2.7.2.4 (Aspartate Kinase)

Gene Symbol: thrA1; thrA2; **thrB** ; **thrC**

32/8/5 (Item 5 from file: 155)

DIALOG(R)File 155:(c) format only 2006 Dialog. All rts. reserv.

08069910 PMID: 2542227

Translational coupling in the threonine operon of Escherichia coli K-12.

Jun 1989

Descriptors: *Carbon-Oxygen Lyases; *Escherichia coli--genetics--GE; *Phosphotransferases (Alcohol Group Acceptor); *Threonine--genetics--GE; Cloning, Molecular; Gene Expression Regulation; Genes, Bacterial; Homoserine Dehydrogenase--genetics--GE; Lyases--genetics--GE; Molecular Weight; Operon; Phosphotransferases--genetics--GE; Protein Biosynthesis; Recombinant Fusion Proteins--genetics--GE

CAS Registry No.: 0 (Recombinant Fusion Proteins); 72-19-5 (Threonine)

Enzyme No.: EC 1.1.1.3 (Homoserine Dehydrogenase); EC 2.7 (Phosphotransferases); EC 2.7.1 (Phosphotransferases (Alcohol Group Acceptor)); EC 2.7.1.39 (homoserine kinase); EC 4. (Lyases); EC 4.2 (Carbon-Oxygen Lyases); EC 4.2.99.2 (threonine synthase)

32/8/6 (Item 6 from file: 155)

DIALOG(R)File 155:(c) format only 2006 Dialog. All rts. reserv.

07526081 PMID: 3121445

Cloning and characterization of the mutated threonine operon (thrA (1)5A(2)5BC) of Serratia marcescens.

1987

Descriptors: *Operon; *Serratia marcescens--genetics--GE; *Threonine--genetics--GE; Bacterial Proteins--genetics--GE; Chromosome Mapping;

Cloning, Molecular; Gene Expression Regulation; Genes, Bacterial; Mutation; Plasmids; *Serratia marcescens*--metabolism--ME; Threonine--biosynthesis--BI
CAS Registry No.: 0 (Bacterial Proteins); 0 (Plasmids); 72-19-5 (Threonine)

32/8/7 (Item 7 from file: 155)

DIALOG(R)File 155:(c) format only 2006 Dialog. All rts. reserv.

07355672 PMID: 3035340

Cloning and expression in *Escherichia coli* of the homoserine kinase (thrB) gene from *Brevibacterium lactofermentum*.

Mar 1987

Descriptors: **Brevibacterium*--genetics--GE; *Cloning, Molecular;
**Escherichia coli*--genetics--GE; *Genes; *Genes, Bacterial;
*Phosphotransferases--genetics--GE; *Phosphotransferases (Alcohol Group Acceptor); *Transcription, Genetic; *Brevibacterium*--enzymology--EN; DNA Restriction Enzymes; Genotype; Nucleic Acid Hybridization; Plasmids; Research Support, Non-U.S. Gov't

CAS Registry No.: 0 (Plasmids)

Enzyme No.: EC 2.7 (Phosphotransferases); EC 2.7.1 (Phosphotransferases (Alcohol Group Acceptor)); EC 2.7.1.39 (homoserine kinase); EC 3.1.21 (DNA Restriction Enzymes)

32/8/8 (Item 8 from file: 155)

DIALOG(R)File 155:(c) format only 2006 Dialog. All rts. reserv.

05472866 PMID: 6259626

Nucleotide sequence of the thrB gene of *E. coli*, and its two adjacent regions; the thrAB and thrBC junctions.

Jan 24 1981

Descriptors: **Escherichia coli*--genetics--GE; *Genes; *Phosphotransferase s (Alcohol Group Acceptor); Amino Acid Sequence; Base Composition; Base Sequence; Codon; DNA Restriction Enzymes; Genetic Code; Phosphotransferases --genetics--GE; Research Support, Non-U.S. Gov't; Transduction, Genetic

Molecular Sequence Databank No.: GENBANK/J01706; GENBANK/J01707; GENBANK/J01708; GENBANK/J01709; GENBANK/V00360; GENBANK/X00092

CAS Registry No.: 0 (Codon)

Enzyme No.: EC 2.7 (Phosphotransferases); EC 2.7.1 (Phosphotransferases (Alcohol Group Acceptor)); EC 2.7.1.39 (homoserine kinase); EC 3.1.21 (DNA Restriction Enzymes)

32/8/9 (Item 9 from file: 155)

DIALOG(R)File 155:(c) format only 2006 Dialog. All rts. reserv.

05449194 PMID: 6257640

Distribution of Tn551 insertion sites responsible for auxotrophy on the *Staphylococcus aureus* chromosome.

Jan 1981

Descriptors: *Amino Acids--biosynthesis--BI; *Chromosomes, Bacterial; *DNA Transposable Elements; *Mutation; **Staphylococcus aureus*--genetics--GE; Chromosome Mapping; Linkage (Genetics); Purines--biosynthesis--BI; Research Support, U.S. Gov't, P.H.S.; *Staphylococcus aureus*--metabolism--ME; Transformation, Bacterial; Uracil--biosynthesis--BI

CAS Registry No.: 0 (Amino Acids); 0 (DNA Transposable Elements); 0 (Purines); 66-22-8 (Uracil)

32/8/10 (Item 1 from file: 73)
12981913 EMBASE No: 2005043981
A probabilistic measure for alignment-free sequence comparison
12 DEC 2004

32/8/11 (Item 2 from file: 73)
12647995 EMBASE No: 2004248863
Role of homoserine and threonine pathway intermediates as precursors for
the biosynthesis of aminoethoxyvinylglycine in Streptomyces sp. NRRL 5331
2004

32/8/12 (Item 3 from file: 73)
11163022 EMBASE No: 2001178442
Analysis of genomic sequences by Chaos Game Representation
2001

32/8/13 (Item 4 from file: 73)
03976754 EMBASE No: 1989145750
Translational coupling in the threonine operon of Escherichia coli K-12
1989

32/8/14 (Item 5 from file: 73)
00166313 EMBASE No: 1974156437
Mapping of the structural genes of the three aspartokinases and of the
two homoserine dehydrogenases of Escherichia coli K 12
1974

32/8/15 (Item 1 from file: 34)
DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.
13435681 Genuine Article#: 880JR Number of References: 20
Title: A probabilistic measure for alignment-free sequence comparison (ABSTRACT AVAILABLE)
Publication date: 20041212
Journal Subject Category: BIOCHEMICAL RESEARCH METHODS; BIOTECHNOLOGY & APPLIED MICROBIOLOGY; COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS; MATHEMATICS, INTERDISCIPLINARY APPLICATIONS; STATISTICS & PROBABILITY
Identifiers--KeyWord Plus(R): HIDDEN MARKOV-MODELS; DISTANCE; DISSIMILARITY

32/8/16 (Item 2 from file: 34)
DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.
12820789 Genuine Article#: 822KK Number of References: 28
Title: Role of homoserine and threonine pathway intermediates as precursors for the biosynthesis of aminoethoxyvinylglycine in Streptomyces sp NRRL 5331 (ABSTRACT AVAILABLE)
Publication date: 20040500
Journal Subject Category: MICROBIOLOGY
Identifiers--KeyWord Plus(R): 1-AMINOCYCLOPROPANE-1-CARBOXYLATE SYNTHASE; BRADYRHIZOBIUM-JAPONICUM; PSEUDOMONAS-ANDROPOGONIS; POLYKETIDE SYNTHASE; L-VINYLGLYCINE; AMINO-ACIDS; RHIZOBITOXINE; INHIBITION; GENES; SEQUENCE

32/8/17 (Item 3 from file: 34)

DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

09660965 Genuine Article#: 433FZ Number of References: 31

Title: Analysis of genomic sequences by Chaos Game Representation (ABSTRACT AVAILABLE)

Publication date: 20010500

Journal Subject Category: BIOCHEMICAL RESEARCH METHODS; BIOLOGY, MISCELLANEOUS; COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS

Identifiers--KeyWord Plus(R): DNA-SEQUENCES; FUNCTION SYSTEMS; DIVERSE; TOOL; GENE

? s s7 and pckA gene

14 S7

8 PCKA GENE

S60 2 S7 AND PCKA GENE

? t s60/free/1-2

60/8/1 (Item 1 from file: 34)

DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

09625724 Genuine Article#: 429BB Number of References: 74

Title: Does phosphoenolpyruvate carboxykinase have a role in both amino acid and carbohydrate metabolism? (ABSTRACT AVAILABLE)

Publication date: 20010000

Journal Subject Category: BIOCHEMISTRY & MOLECULAR BIOLOGY

Descriptors--Author Keywords: amino acid metabolism ; asparagine ; glutamate ; higher plants ; oxaloacetate ; phosphoenolpyruvate carboxykinase

Identifiers--KeyWord Plus(R): ESCHERICHIA-COLI; SACCHAROMYCES-CEREVISIAE; GENE-EXPRESSION; C-4 PLANTS; UROCHLOA PANICOIDES; CARBON METABOLISM; ACTIVATOR CAT8P; BUNDLE-SHEATH; MESSENGER-RNA; PCKA GENE

60/8/2 (Item 2 from file: 34)

DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

07757943 Genuine Article#: 205LB Number of References: 46

Title: Molecular and functional characterization of the Rhodospseudomonas palustris No. 7 phosphoenolpyruvate carboxykinase gene (ABSTRACT AVAILABLE)

Publication date: 19990500

Journal Subject Category: MICROBIOLOGY

Identifiers--KeyWord Plus(R): SITE-DIRECTED MUTAGENESIS; PCKA GENE; SACCHAROMYCES-CEREVISIAE; PYRUVATE CARBOXYKINASE; TRYPANOSOMA-CRUZI; ENZYME-ACTIVITIES; MALIC ENZYME; SP NO-7; SEQUENCE; PURIFICATION

? s knockout plasmid

S61 0 KNOCKOUT PLASMID

? s knockout gene

S62 2774 KNOCKOUT GENE

? s s62 and pckA

2774 S62

105 PCKA

S63 1 S62 AND PCKA

? t s63/free/1

63/8/1 (Item 1 from file: 73)

12631475 EMBASE No: 2004227671

Effect of a pyruvate kinase (pykF-gene) knockout mutation on the control of gene expression and metabolic fluxes in Escherichia coli

01 JUN 2004

? s s63 and tdc
 1 S63
 1280 TDC
 S64 0 S63 AND TDC
 ? s inactivated pckA
 S65 0 INACTIVATED PCKA
 ? s exogenous pckA gene
 S66 0 EXOGENOUS PCKA GENE
 ? s chromosomal pckA
 S67 0 CHROMOSOMAL PCKA
 ? s pckA resistnace(w) threonine
 0 PCKA RESISTNACE
 92146 THREONINE
 S68 0 PCKA RESISTNACE(W) THREONINE
 ? s pckA gene resistance amino acids
 S69 0 PCKA GENE RESISTANCE AMINO ACIDS
 ? s pckA gene resistance amino acids
 S70 0 PCKA GENE RESISTANCE AMINO ACIDS
 ? save temp
 Temp SearchSave "TB304941829" stored
 ? s loxp sites knockout
 S71 0 LOXP SITES KNOCKOUT
 ?

Untitled

(c) 2006 CAB International
 File 65:Inside Conferences 1993-2006/Oct 05
 (c) 2006 BLDSC all rts. reserv.
 File 71:ELSEVIER BIOBASE 1994-2006/Oct W1
 (c) 2006 Elsevier B.V.
 File 73:EMBASE 1974-2006/Oct 06
 (c) 2006 Elsevier B.V.
 File 94:JICST-EPlus 1985-2006/Jul W1
 (c)2006 Japan Science and Tech Corp(JST)
 File 98:General Sci Abs 1984-2006/Oct
 (c) 2006 The HW Wilson Co.
 File 103:Energy SciTec 1974-2006/Aug B1
 (c) 2006 Contains copyrighted material
 *File 103: For access restrictions see Help Restrict.
 File 136:BioEngineering Abstracts 1966-2006/Aug
 (c) 2006 CSA.
 File 143:Biol. & Agric. Index 1983-2006/Jul
 (c) 2006 The HW Wilson Co
 File 144:Pascal 1973-2006/Sep W2
 (c) 2006 INIST/CNRS
 File 155:MEDLINE(R) 1950-2006/Oct 05
 (c) format only 2006 Dialog
 File 156:ToxFile 1965-2006/Sep W4
 (c) format only 2006 Dialog
 File 162:Global Health 1983-2006/Aug
 (c) 2006 CAB International
 File 172:EMBASE Alert 2006/Oct 06
 (c) 2006 Elsevier B.V.
 File 305:Analytical Abstracts 1980-2006/Sep W3
 (c) 2006 Royal Soc Chemistry
 *File 305: Alert feature enhanced for multiple files, duplicate
 removal, customized scheduling. See HELP ALERT.
 File 369:New Scientist 1994-2006/Aug W2
 (c) 2006 Reed Business Information Ltd.
 File 370:Science 1996-1999/Jul W3
 (c) 1999 AAAS
 *File 370: This file is closed (no updates). Use File 47 for more current
 information.
 File 393:Beilstein Abstracts 2006/Q3
 (c) 2006 Beilstein GmbH
 File 399:CA SEARCH(R) 1967-2006/UD=14514
 (c) 2006 American Chemical Society
 *File 399: Use is subject to the terms of your user/customer agreement.
 IPCR/8 classification codes now searchable as IC=. See HELP NEWSIPCR.
 File 434:Scisearch(R) Cited Ref Sci 1974-1989/Dec
 (c) 2006 The Thomson Corp

Set Items Description

```
? b medicine
>>> 138 is unauthorized
>>>1 of the specified files is not available
06oct06 10:18:51 User294084 Session D9.11
$0.03 0.006 DialUnits File5
$0.03 Estimated cost File5
$0.04 0.006 DialUnits File6
$0.04 Estimated cost File6
$0.04 0.006 DialUnits File24
$0.04 Estimated cost File24
$0.13 0.006 DialUnits File34
$0.13 Estimated cost File34
$0.04 0.006 DialUnits File40
$0.04 Estimated cost File40
```


Untitled

File 73:EMBASE 1974-2006/Oct 06
 (c) 2006 Elsevier B.V.
 File 91:MANTIS(TM) 1880-2006/Jan
 2001 (c) Action Potential
 File 94:JICST-EPlus 1985-2006/Jul w1
 (c)2006 Japan Science and Tech Corp(JST)
 File 98:General Sci Abs 1984-2006/Oct
 (c) 2006 The HW Wilson Co.
 File 135:NewsRx Weekly Reports 1995-2006/Oct w1
 (c) 2006 NewsRx
 File 144:Pascal 1973-2006/Sep w2
 (c) 2006 INIST/CNRS
 File 149:TGG Health&Wellness DB(SM) 1976-2006/Sep w3
 (c) 2006 The Gale Group
 File 155:MEDLINE(R) 1950-2006/Oct 05
 (c) format only 2006 Dialog
 File 156:ToxFile 1965-2006/Sep w4
 (c) format only 2006 Dialog
 File 159:Cancerlit 1975-2002/Oct
 (c) format only 2002 Dialog
 *File 159: Cancerlit is no longer updating.
 Please see HELP NEWS159.
 File 162:Global Health 1983-2006/Aug
 (c) 2006 CAB International
 File 164:Allied & Complementary Medicine 1984-2006/Oct
 (c) 2006 BLHCIS
 File 172:EMBASE Alert 2006/Oct 06
 (c) 2006 Elsevier B.V.
 File 266:FEDRIP 2006/Aug
 Comp & dist by NTIS, Intl Copyright All Rights Res
 File 369:New Scientist 1994-2006/Aug w2
 (c) 2006 Reed Business Information Ltd.
 File 370:Science 1996-1999/Jul w3
 (c) 1999 AAAS
 *File 370: This file is closed (no updates). Use File 47 for more current
 information.
 File 399:CA SEARCH(R) 1967-2006/UD=14514
 (c) 2006 American Chemical Society
 *File 399: Use is subject to the terms of your user/customer agreement.
 IPCR/8 classification codes now searchable as IC=. See HELP NEWSIPCR.
 File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
 (c) 2006 The Thomson Corp
 File 444:New England Journal of Med. 1985-2006/Sep w4
 (c) 2006 Mass. Med. Soc.
 File 467:ExtraMED(tm) 2000/Dec
 (c) 2001 Informania Ltd.

Set Items Description

? b agri

```
>>>      29 is unauthorized
>>>      44 is unauthorized
>>>     117 is unauthorized
>>>3 of the specified files are not available
06oct06 10:18:56 User294084 Session D9.12
$0.04      0.006 DialUnits File5
$0.04 Estimated cost File5
$0.15      0.006 DialUnits File34
$0.15 Estimated cost File34
$0.03      0.006 DialUnits File35
$0.03 Estimated cost File35
$0.03      0.006 DialUnits File45
$0.03 Estimated cost File45
```

Trying 31060000009999...Open

DIALOG INFORMATION SERVICES

PLEASE LOGON:

***** HHHHHHHH SSSSSSSS? ### Status: Signing onto Dialog *****

ENTER PASSWORD:

***** HHHHHHHH SSSSSSSS? *****

Welcome to DIALOG

Status: Login successfulDialog level 05.12.03D

Last logoff: 05sep06 13:41:23

Logon file001 29sep06 14:37:06

*** ANNOUNCEMENTS ***

NEW FILES RELEASED

***Verdict Market Research (File 769)

***EMCare (File 45)

***Trademarkscan - South Korea (File 655)

***Regulatory Affairs Journals (File 183)

***Index Chemicus (File 302)

***Inspec (File 202)

RESUMED UPDATING

***File 141, Reader's Guide Abstracts

RELOADS COMPLETED

***File 11, PsycInfo

***File 531, American Business Directory

*** The 2005 reload of the CLAIMS files (Files 340, 341, 942)
is now available online.

DATABASES REMOVED

***File 196, FINDEX

***File 468, Public Opinion Online (POLL)

Chemical Structure Searching now available in Prous Science Drug
Data Report (F452), Prous Science Drugs of the Future (F453),
IMS R&D Focus (F445/955), Pharmaprojects (F128/928), Beilstein
Facts (F390), Derwent Chemistry Resource (F355) and Index Chemicus
(File 302).

>>>For the latest news about Dialog products, services, content<<<

>>>and events, please visit What's New from Dialog at <<<

>>><http://www.dialog.com/whatsnew/>. You can find news about<<<

>>>a specific database by entering HELP NEWS <file number>.<<<

* * *

File 1:ERIC 1966-2006/Aug

(c) format only 2006 Dialog

Set Items Description

--- -----

Cost is in DialUnits

?

Terminal set to DLINK

? b 411

29sep06 14:37:22 User294084 Session D7.1

\$0.40 0.114 DialUnits File1

\$0.40 Estimated cost File1

\$0.06 TELNET

\$0.46 Estimated cost this search
\$0.46 Estimated total session cost 0.114 DialUnits

File 411:DIALINDEX(R)

DIALINDEX(R)

(c) 2006 Dialog

*** DIALINDEX search results display in an abbreviated ***
*** format unless you enter the SET DETAIL ON command. ***

? sf all science

>>>"SCIENCE" is not a valid Dialindex category

You have 566 files in your file list.

(To see banners, use SHOW FILES command)

? sf allscience

You have 297 files in your file list.

(To see banners, use SHOW FILES command)

? b 155, 73

29sep06 14:41:54 User294084 Session D7.2

\$0.84 0.318 DialUnits File411

\$0.84 Estimated cost File411

\$1.33 TELNET

\$2.17 Estimated cost this search

\$2.63 Estimated total session cost 0.432 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 155:MEDLINE(R) 1950-2006/Sep 28

(c) format only 2006 Dialog

File 73:EMBASE 1974-2006/Sep 29

(c) 2006 Elsevier B.V.

Set Items Description

? b 155, 5, 73, 34, 434

>>>"5." is not a valid category or service name

29sep06 14:45:30 User294084 Session D7.3

\$0.18 0.054 DialUnits File155

\$0.18 Estimated cost File155

\$0.60 0.054 DialUnits File73

\$0.60 Estimated cost File73

OneSearch, 2 files, 0.107 DialUnits FileOS

\$1.06 TELNET

\$1.84 Estimated cost this search

\$4.47 Estimated total session cost 0.540 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 155:MEDLINE(R) 1950-2006/Sep 28

(c) format only 2006 Dialog

File 73:EMBASE 1974-2006/Sep 29

(c) 2006 Elsevier B.V.

File 34:SciSearch(R) Cited Ref Sci 1990-2006/Sep W4

(c) 2006 The Thomson Corp

File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec

(c) 2006 The Thomson Corp

Set Items Description

? s E. coli

S1 882 E. COLI

? s Escherichia coli
 ~~S2~~ 321744 ~~ESCHERICHIA COLI~~
 ? s bacterial strain
 ~~S3~~ 24837 ~~BACTERIAL STRAIN~~
 ? s E. coli strain
 S4 0 E. COLI STRAIN
 ? s Escherichia coli strain
 S5 0 ESCHERICHIA COLI STRAIN
 ? s bacteria e. coli strain
 S6 0 BACTERIA E. COLI STRAIN
 ? s e coli strain
 S7 1 E COLI STRAIN
 ? s escherichia coli
 ~~S8~~ 321744 ~~ESCHERICHIA COLI~~
 ? s ~~s8 and strain~~
 ~~321744~~ S8
 ~~747122~~ STRAIN
 S9 35981 S8 AND STRAIN
 ? s s1 and s2 and s3 and s7 and s8 and s9
 882 S1
 321744 S2
 24837 S3
 1 S7
 321744 S8
 35981 S9
 S10 0 S1 AND S2 AND S3 AND S7 AND S8 AND S9
 ? s s1 and s2
 882 S1
 321744 S2
 S11 1 S1 AND S2
 ? s s1 and pckA gene
 882 S1
 8 PCKA GENE
 S12 0 S1 AND PCKA GENE *OE. coli + pckA gene*
 ? s s2 and pckA gene
 321744 S2
 8 PCKA GENE
 S13 0 S2 AND PCKA GENE *OEsher. + pckA gene*
 ? s tdcBC
 S14 0 TDCBC — *no such thing*
 ? s tdcB
 S15 64 TDCB ✓
 ? s tdcC
 S16 54 TDCC ✓
 ? s s15 and s16
 64 S15
 54 S16
 S17 6 S15 AND S16
 ? s s17 and operon
 6 S17
 56179 OPERON
 S18 6 S17 AND OPERON
 ? s s18 and pckA
 6 S18
 105 PCKA
 S19 0 S18 AND PCKA
 ? s s18 and knockout plasmid
 6 S18
 0 KNOCKOUT PLASMID
 S20 0 S18 AND KNOCKOUT PLASMID
 ? s s18 knockout? plasmid?

>>>Term "KNOCKOUT?" in invalid position
? s s18 and knockout(1w) plasmid(1w)
>>>Possible typing error near end of command
? s s18 and plasmid

```
      6 S18
      203270 PLASMID
      S21      4 S18 AND PLASMID
? s knockout
      S22      90534 KNOCKOUT
? s knockout plasmid
      S23      0 KNOCKOUT PLASMID
? s plasmid
      S24      203270 PLASMID
? s s22 and s24
      90534 S22
      203270 S24
      S25      834 S22 AND S24
? s s25 and s18
      834 S25
      6 S18
      S26      0 S25 AND S18
? s s25 and pckA
      834 S25
      105 PCKA
      S27      0 S25 AND PCKA
? s s25 and pckA gene
      834 S25
      8 PCKA GENE
      S28      0 S25 AND PCKA GENE
? s s25 and pep carboxylase
      834 S25
      47 PEP CARBOXYLASE
      S29      0 S25 AND PEP CARBOXYLASE
? s phosphoenolpyruvate carboxylase
      S30      1585 PHOSPHOENOLPYRUVATE CARBOXYLASE
? s pepck
      S31      2695 PEPCK
? s s25 and s30
      834 S25
      1585 S30
      S32      0 S25 AND S30
? s s25 and s31
      834 S25
      2695 S31
      S33      0 S25 AND S31
? s s1 and pckA
      882 S1
      105 PCKA
      S34      0 S1 AND PCKA
? s s2
      S35      321744 S2
?
```

threonine dehydratase gene

s pckA gene
S15 +

Cluster search b biochem - medline - agric

b biochem

b medline

b agric

Untitled

0197655 DBR Accession No.: 96-07796

DNA containing B. flavum MJ-233 phosphoenolpyruvate - carboxylase gene - Brevibacterium flavum gene cloning and expression for e.g. amino acid production 1996

20/8/91 (Item 82 from file: 357)

0181873 DBR Accession No.: 95-06090

Variant of phosphoenolpyruvate - carboxylase - enzyme engineering for reduced aspartic acid feedback inhibition; expression in Escherichia coli for improved amino acid production 1995

20/8/92 (Item 83 from file: 357)

0091709 DBR Accession No.: 89-09700

Genetic engineering of Brevibacterium lactofermentum to breed amino acid producers - strain improvement and application in industry; vector construction, protoplast fusion and mutagenesis (conference paper) 1987

20/8/93 (Item 84 from file: 357)

0091077 DBR Accession No.: 89-09068

Breeding of amino acid producers by genetic engineering - (conference abstract) 1987

20/8/94 (Item 85 from file: 357)

0049201 DBR Accession No.: 86-07049

Fermentative production of amino acid - using coryneform bacteria with two recombinant plasmid vectors containing enzyme genes 1986

20/8/95 (Item 86 from file: 357)

0037892 DBR Accession No.: 85-08681

Recombinant DNA containing phosphoenolpyruvate - carboxylase gene - useful in Corynebacterium or Brevibacterium for improved amino acid production 1985

? ds

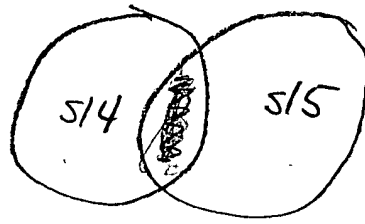
Set	Items	Description
S1	4320007	COLI OR ESCHERICHIA OR BACTER?
S2	56133	PCKA OR PPC OR PHOSPHOENOLPYRUVATE OR PEPC OR PYRUVATE (W) CARBOXYLASE OR PEP
S3	3134	TDCB OR THREONINE (W) DEHYDRATASE OR SERINE (W) DEHYDRATASE OR THREONINE (W) DEAMINASE
S4	97	TDCC OR THREONINE (W) SERINE (W) TRANSPORTER
S5	281	THRA
S6	443	THRB
S7	165	THRC
S8	4207740	INACTIVAT? OR DEACTIVAT? OR ATTENUAT? OR MUTAT? OR DELET? - OR SUBSTIT? OR RECOMB?
S9	1	S1 AND S2 AND S3 AND S4 AND S8
S10	3927811	BACTER?
S11	1	S10 AND S2 AND S3 AND S4 AND S8
S12	1638859	THREONINE OR AMINO (W) ACID? OR AMINOACID
S13	11023066	PRODUC? OR MANUFACTURE
S14	2896	S13 AND S10 AND S2
S15	1076	S14 AND S8
S16	874	S15 NOT PY>=2004
S17	650	RD (unique items)
S18	3319	THREONINE (W) (PRODUC? OR MANUFACTURE) OR (AMINO (W) ACID) (W) (PRODUC? OR MANUFACTURE)

Page 50

S1 and S2 and (S3 or S4 or S5 or S6 or S7 or S22) and S8 and S12

S19 101 S18 AND S8 AND S10 AND S2
 S20 95 RD (unique items)
 ? s s18 and s8 and s10 and s2 and s3 and s4
 3319 S18
 4207740 S8
 3927811 S10
 56133 S2
 3134 S3
 97 S4
 S21 1 S18 AND S8 AND S10 AND S2 AND S3 AND S4
 ?

Untitled



10xpcat mutant? mutation knockout recombine

E. coli

S/4
 S/5
 S/8
 S20
 S22

Knockout Knock (w) out
 operon??

suppress? (5n) s3-s5

(feedback or feed (w) back)
 (3n) inhib?

? ds

Set	Items	Description
S1	8028497	COLI OR ESCHERICHIA OR BACTER?
S2	101534	PCKA OR PPC OR PHOSPHOENOLPYRUVATE OR PEPC OR PYRUVATE (W) CARBOXYLASE OR PEP
S3	6298	TDCCB OR THREONINE (W) DEHYDRATASE OR SERINE (W) DEHYDRATASE OR THREONINE (W) DEAMINASE
S4	175	TDCC OR THREONINE (W) SERINE (W) TRANSPORTER
S5	1385	THRA OR THRB OR THRC OR TDCBC
S6	9625591	INACTIVAT? OR DEACTIVAT? OR ATTENUAT? OR MUTAT? OR MUTANT? OR DELET? OR SUBSTITUT? OR RECOMB? OR DISRUPT?
S7	213846	THREONINE
S8	113	S1 AND S2 AND S3-S5 AND S6 AND S7
S9	111	RD (unique items)
S10	230493	KNOCKOUT OR KNOCK(W)OUT
S11	4335	KNOCKEDOUT OR KNOCKED(W)OUT
S12	137734	OPERON
S13	37	SUPPRESS?(5N)S3-S5
S14	8	S9 AND S10-S11
S15	7	S9 AND S12
S16	0	S13 AND S9
S17	7	S13 AND S1
S18	5	RD S17 (unique items)
S19	20	S13 AND S7
S20	8	RD (unique items)
S21	26456	(FEEDBACK OR FEED(W)BACK) (3N)INHIB?
S22	1	S21 AND S9
S23	22	S14 OR S15 OR S18 OR S20 OR S22

? t s23/7/1-22

>>>Format 7 is not valid in file 143

Untitled

22/8/1 (Item 1 from file: 357)
0325190 DBR Accession No.: 2003-26331
New recombinant plasmid having a deactivated threonine dehydratase (tdc) gene, useful for transforming a microorganism for increased production of L-threonine for medical and pharmaceutical use - vector-mediated mutant threonine - dehydratase gene transfer and expression in host cell for strain improvement and L-amino acid preparation 2003
? t s17/full/6,15

17/9/6 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2006 The Thomson Corporation. All rts. reserv.

0014565222 BIOSIS NO.: 200300533941
~~Manipulation of chromosomal gene expression for metabolic pathway engineering of Escherichia coli.~~
AUTHOR: Cervin M A (Reprint); Valle F (Reprint)
AUTHOR ADDRESS: Genencor International, Inc., Palo Alto, CA, USA**USA
~~JOURNAL: Abstracts of the General Meeting of the American Society for Microbiology 103 pk 104 2003 2003~~
MEDIUM: cd-rom
CONFERENCE/MEETING: 103rd American Society for Microbiology General Meeting Washington, DC, USA May 18-22, 2003; 20030518
SPONSOR: American Society for Microbiology
ISSN: 1060-2011 (ISSN print)
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: A vital component of the success of metabolic pathway engineering is the ability to control the expression of genes on the chromosome of the host organism rather than relying on plasmid based constructions. In this study we describe a method for the rapid, markerless replacement of promoters in the chromosome of Escherichia coli. The method involves the amplification of a "promoter cassette" with the following structure: 5'-sequence homologous to the upstream target region, a loxP or FRT site, a selectable marker, the downstream loxP or FRT site, the ptrc or other promoter, sequence homologous to the downstream target region-3'. The cassette is amplified by PCR and transformed by electroporation into an appropriate E. coli host using the lambdared system (Datsenko and Wanner, 2000 PNAS 97, 6640). Once the integration of the promoter is confirmed by sequencing, the marker is looped out by introduction of the appropriate recombinase. The target DNA flanking the promoter and marker is selected such that the synthetic promoter cassette will replace the entire natural promoter region, including any regulatory sequences. As a demonstration, we will present the construction of a PEP-independent glucose transport system in an E. coli host with a deletion of the PEP-PTS_{glc} system. The synthetic promoter cassettes were designed to replace the regulatory regions and natural promoters of both galP and glk, which encode the galactose permease and glucokinase respectively. This resulted in the constitutive expression of both genes which allowed glucose to be transported and subsequently phosphorylated to glucose-6-phosphate for entry into the glycolytic pathway. Function of the alternate transport system was confirmed by the production of glycerol from glucose by plasmid encoded Dar1 and GPP2 demonstrating the feasibility of this promoter replacement system for metabolic pathway engineering.

REGISTRY NUMBERS: 9001-36-9Q: glucokinase; 9001-51-8Q: glucokinase;
173585-07-4Q: glucokinase; 9001-36-9: glucokinase; 50-99-7Q: glucose;
58367-01-4Q: glucose; 56-73-5: glucose-6-phosphate; 56-81-5: glycerol
ENZYME COMMISSION NUMBER: EC 2.7.1.2: glucokinase

Untitled

DESCRIPTORS:

MAJOR CONCEPTS: Bioprocess Engineering; Enzymology--Biochemistry and Molecular Biophysics; Metabolism; Methods and Techniques; Molecular Genetics--Biochemistry and Molecular Biophysics
BIOSYSTEMATIC NAMES: Enterobacteriaceae--Facultatively Anaerobic Gram-Negative Rods, Eubacteria, Bacteria, Microorganisms
ORGANISMS: Escherichia coli (Enterobacteriaceae)
COMMON TAXONOMIC TERMS: Bacteria; Eubacteria; Microorganisms
CHEMICALS & BIOCHEMICALS: PEPT-PTSglc system; galactose permease; glucokinase; glucose--phosphorylation, transport; glucose-6-phosphate; glycerol-- production; recombinase
GENE NAME: Escherichia coli Dar1 gene (Enterobacteriaceae); Escherichia coli GPP2 gene (Enterobacteriaceae); Escherichia coli galP gene (Enterobacteriaceae); Escherichia coli glk gene (Enterobacteriaceae); Escherichia coli loxP gene (Enterobacteriaceae)
METHODS & EQUIPMENT: PCR amplification {polymerase chain reaction amplification}--genetic techniques, laboratory techniques; chromosomal gene expression manipulation--genetic techniques, laboratory techniques; electroporation--genetic techniques, laboratory techniques; metabolic pathway engineering--applied and field techniques, genetic techniques, laboratory techniques; promoter replacement system--genetic techniques, laboratory techniques

CONCEPT CODES:

00520 General biology - Symposia, transactions and proceedings
03502 Genetics - General
10060 Biochemistry studies - General
10062 Biochemistry studies - Nucleic acids, purines and pyrimidines
10068 Biochemistry studies - Carbohydrates
10802 Enzymes - General and comparative studies: coenzymes
13002 Metabolism - General metabolism and metabolic pathways
31000 Physiology and biochemistry of bacteria
31500 Genetics of bacteria and viruses
39008 Food microbiology - General and miscellaneous

BIOSYSTEMATIC CODES:

06702 Enterobacteriaceae

17/9/15 (Item 15 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2006 The Thomson Corporation. All rts. reserv.

0014192678 BIOSIS NO.: 200300151397

~~Construction and enzymatic characterization of E. coli gltA and -PPC mutants.~~ *STC*

AUTHOR: Vandedrinck Sofie (Reprint); De Maeseneire Sofie (Reprint); Deschamps Geert; Sablon Erwin; Vandamme Erick J (Reprint)

AUTHOR ADDRESS: Laboratory of Industrial Microbiology and Biocatalysis, Department of Biochemical and Microbial Technology, Ghent University, Coupure Links 653, B-9000, Gent, Belgium**Belgium

JOURNAL: Mededelingen Faculteit Landbouwkundige en Toegepaste Biologische Wetenschappen Universiteit Gent 67 (4): p261-264 2002 2002

MEDIUM: print

ISSN: 1373-7503 (ISSN print)

DOCUMENT TYPE: Article

RECORD TYPE: Citation

LANGUAGE: English

REGISTRY NUMBERS: 9027-96-7: citrate synthase; 9013-08-5Q:

phosphoenolpyruvate carboxylase; 9013-12-1Q: phosphoenolpyruvate

carboxylase; 9067-77-0Q: phosphoenolpyruvate carboxylase;

9073-94-3Q: phosphoenolpyruvate carboxylase; 9067-77-0:

phosphoenolpyruvate carboxylase

ENZYME COMMISSION NUMBER: EC 4.1.3.7: citrate synthase; EC 4.1.1.31:

phosphoenolpyruvate carboxylase

Untitled

DESCRIPTORS:

MAJOR CONCEPTS: Bioprocess Engineering; Enzymology--Biochemistry and Molecular Biophysics; Metabolism; Molecular Genetics--Biochemistry and Molecular Biophysics

BIOSYSTEMATIC NAMES: Bacteria --Microorganisms; Enterobacteriaceae--Facultatively Anaerobic Gram-Negative Rods, Eubacteria, Bacteria , Microorganisms

ORGANISMS: bacteria (Bacteria); Escherichia coli (Enterobacteriaceae) --expression system

COMMON TAXONOMIC TERMS: Bacteria ; Eubacteria; Microorganisms

CHEMICALS & BIOCHEMICALS: enzymes--analysis, activities, functions; recombinant proteins-- production ; citrate synthase; phosphoenolpyruvate carboxylase; metabolites-- production , characterization

METHODS & EQUIPMENT: enzyme activity assays--bioassay techniques, laboratory techniques; Western blotting--genetic techniques, laboratory techniques

MISCELLANEOUS TERMS: gene mutations --characterization, construction, gltA, ppc ; industrial microbiology--applications; tricarboxylic acid cycle; bacterial genetics; glycolysis

CONCEPT CODES:

03502 Genetics - General

10064 Biochemistry studies - Proteins, peptides and amino acids

10802 Enzymes - General and comparative studies: coenzymes

13002 Metabolism - General metabolism and metabolic pathways

31000 Physiology and biochemistry of bacteria

31500 Genetics of bacteria and viruses

39008 Food microbiology - General and miscellaneous

BIOSYSTEMATIC CODES:

05000 Bacteria

06702 Enterobacteriaceae

?

Untitled

20/9/5 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2006 The Thomson Corporation. All rts. reserv.

0011461932 BIOSIS NO.: 199800256179

~~Pyruvate carboxylase from Corynebacterium glutamicum: Characterization, expression and inactivation of the pyc gene~~

AUTHOR: Peters-Wendisch Petra G (Reprint); Kretzner Caroline; Kalinowski Joern; Patek Miroslav; Sahm Hermann; Eikmanns Bernhard J

AUTHOR ADDRESS: Dep. Plant Microbiol. Biol., Univ. Calif., Berkeley, CA 94705, USA**USA

JOURNAL: Microbiology (Reading) 144 (4): p915-927 April, 1998 1998

MEDIUM: print

ISSN: 1350-0872

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: In addition to phosphoenolpyruvate carboxylase (PEPCx), pyruvate carboxylase (PCx) has recently been found as an anaplerotic enzyme in the amino - acid producing bacterium *Corynebacterium glutamicum*. Using oligonucleotides designed according to conserved regions of PCx amino acid sequences from other organisms, a 200 bp fragment central to the *C. glutamicum* PCx gene (*pyc*) was amplified from genomic DNA by PCR. This fragment was then used to identify and to subclone the entire *C. glutamicum* *pyc* gene. The cloned *pyc* gene was expressed in *C. glutamicum*, as cells harbouring the gene on plasmid showed four- to five-fold higher specific PCx activities when compared to the wild-type (WT). Moreover, increased PCx protein levels in the *pyc*-plasmid carrying strain were readily detected after SDS-PAGE of cell-free extracts. DNA sequence analysis of the *pyc* gene, including its 5' and 3' flanking regions, and N-terminal sequencing of the *pyc* gene product predicts a PCx polypeptide of 1140 amino acids with an Mr of 123 070. The amino acid sequence of this polypeptide shows between 62% and 45% identity when compared to PCx enzymes from other organisms. Transcriptional analyses revealed that the *pyc* gene from *C. glutamicum* is monocistronic (3.5 kb mRNA) and that its transcription is initiated at an A residue 55 bp upstream of the translational start. Inactivation of the chromosomal *pyc* gene in *C. glutamicum* WT led to the absence of PCx activity and to negligible growth on lactate, indicating that PCx is essential for growth on this carbon source. Inactivation of both the PCx gene and the PEPCx gene in *C. glutamicum* led additionally to the inability to grow on glucose, indicating that no further anaplerotic enzymes for growth on carbohydrates exist in this organism.

REGISTRY NUMBERS: 9014-19-1: pyruvate carboxylase

ENZYME COMMISSION NUMBER: EC 6.4.1.1: pyruvate carboxylase

DESCRIPTORS:

MAJOR CONCEPTS: Enzymology--Biochemistry and Molecular Biophysics;

Molecular Genetics--Biochemistry and Molecular Biophysics

CHEMICALS & BIOCHEMICALS: amino acids--production; enzymes; mRNA { messenger RNA}; *pyc* gene--characterization, expression, inactivation

; pyruvate carboxylase --amino acid sequence; DNA

MOLECULAR SEQUENCE DATABANK NUMBER: Y09548--EMBL, nucleotide sequence

METHODS & EQUIPMENT: PCR {polymerase chain reaction}--DNA amplification method, sequencing techniques

MISCELLANEOUS TERMS: transcription

CONCEPT CODES:

31500 Genetics of bacteria and viruses

10010 Comparative biochemistry

10052 Biochemistry methods - Nucleic acids, purines and pyrimidines

10054 Biochemistry methods - Proteins, peptides and amino acids

10300 Replication, transcription, translation

Untitled

10506 Biophysics - Molecular properties and macromolecules
10808 Enzymes - Physiological studies
31000 Physiology and biochemistry of bacteria

20/9/12 (Item 3 from file: 357)
DIALOG(R) File 357:Derwent Biotech Res.
(c) 2006 The Thomson Corp. All rts. reserv.

0377630 DBR Accession No.: 2005-23336 PATENT

New microorganism belonging to the Enterobacteriaceae family, preferably *Escherichia coli* and having an inactivated *galR* gene, useful for producing high yields of L-threonine - recombinant mutant *Escherichia coli* construction for strain improvement and high yield L- threonine production

AUTHOR: PARK Y H; LEE B C; CHO K M; KIM D C; SHIN Y U; LEE J H

PATENT ASSIGNEE: CJ CORP 2005

PATENT NUMBER: EP 1561811 PATENT DATE: 20050810 WPI ACCESSION NO.:
2005-535382 (200555)

PRIORITY APPLIC. NO.: KR 7529 APPLIC. DATE: 20040205

NATIONAL APPLIC. NO.: EP 2005356022 APPLIC. DATE: 20050204

LANGUAGE: EP

ABSTRACT: DERWENT ABSTRACT: NOVELTY - A microorganism capable of producing L-threonine and having an inactivated *galR* gene, is new. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a method of producing a L- threonine - producing microorganism, comprising preparing an inactivated *galR* gene or its DNA fragment, introducing the inactivated *galR* gene or the DNA fragment into a microorganism capable of producing L-threonine to cause recombination with a *galR* gene present on a chromosome of the microorganism, and selecting microorganisms having an inactivated *galR* gene; and (2) a method for producing L-threonine comprising culturing the microorganism cited above, and isolating L-threonine from the culture. BIOTECHNOLOGY - Preferred Microorganism: The microorganism belongs to the Enterobacteriaceae family, preferably *Escherichia coli* that is resistant to L-methionine, L-threonine and L-lysine analogues and alpha-aminobutyric acid, and has a nutritional requirement for methionine and a leaky requirement for isoleucine. The L-methionine analogue is D,L-ethionine, Norleucine, alpha-methylmethionine or L-methionine-D,L-sulfoximine. The L-threonine analogue is alpha-amino-beta-hydroxy valeric acid or D,L-threonine hydroxamate. The L-lysine analogue is S-(2-aminoethyl)-L-cysteine or delta-methyl-L-lysine. A *pckA* gene on a chromosome is inactivated, and/or *pckA* and *aspA* genes on a chromosome are inactivated. At least one copy of phosphoenol pyruvate carboxylase (*ppc*) gene and *thrA*, *thrB*, and *thrC* genes are inserted into a chromosomal DNA, in addition to intrinsic *ppc* gene and *thrA*, *thrB* and *thrC* genes. The microorganism is selected from *Escherichia coli* FTR2541 (KCCM-10539), *Escherichia coli* FTR2537 (KCCM-10540) and *Escherichia coli* FTR2533 (KCCM-10541).

Preferred Method: The inactivated *galR* gene or the DNA fragment in producing an L- threonine - producing microorganism is prepared by inserting a cassette containing an antibiotic marker (*loxP*KAN) into a *galR* gene. USE - For producing high yields of L-threonine. EXAMPLE - A *galR* gene in a chromosome of *Escherichia coli* was knocked put by homologous recombination. A vector including a portion of the *galR* gene was prepared, and then was transformed into *E. coli* host cell, followed by selecting strains having a knock-out *galR* gene. Genomic DNA was extracted from L- threonine - producing *E. coli* Accession No. KCCM 10236 by using the QIAGEN Genomic-tip system. PCR was performed and the product loaded onto 1.0% agarose gel and subjected to electrophoresis. DNA was purified and ligated to *EcoRV* site of cloning vector pT7Blue overnight at the temperature of 16degreesC to construct the recombinant plasmid pT7Blue/*galR*. The resulting plasmid construct was

Untitled

transformed into E. coli NM522 and later transformed with the recombinant plasmid pT7Delta galR::loxPKAN. The resulting fragment of Delta galR::loxPKAN was transformed into L- threonine - producing E. coli strain Accession No. KCCM 10236, E. coli FTR8625 and E. coli FTR7624 by electroporation and the resulting transformant was streaked out onto a solid LB medium containing kanamycin.(13 pages)

DESCRIPTORS: recombinant mutant Escherichia coli construction, plasmid-mediated inactivated galR protein, antibiotic marker gene transfer, expression in Escherichia coli, electroporation, L-methionine, L-threonine, L-lysine analog, alpha-aminobutyric acid resistance evaluation, homologous recombination, polymerase chain reaction, appl. strain improvement, high yield L- threonine production bacterium fermentation DNA amplification amino acid alcohol (24, 38)

SECTION: PHARMACEUTICALS-Other Pharmaceuticals-GENETIC TECHNIQUES and APPLICATIONS-Gene Expression Techniques and Analysis; FOOD and FOOD-ADDITIVES-Food and Food-Additives-BIOMANUFACTURING and BIOCATALYSIS-Fermentation

20/9/13 (Item 4 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
(c) 2006 The Thomson Corp. All rts. reserv.

0377536 DBR Accession No.: 2005-23242 PATENT
New microorganism (i.e. Escherichia coli FTR7624) having an inactivated tyrR gene, useful for producing L-threonine which may be utilized as a feed or food additive, or as a pharmaceutical or raw material for synthesizing drugs - method of recombinant production of L-threonine from an Escherichia coli having a tyrR gene inactivation useful for the production of a feed-additive

AUTHOR: PARK Y H; LEE B C; PARK J Y; CHO K M; SHIN Y U

PATENT ASSIGNEE: CJ CORP 2005

PATENT NUMBER: US 20050176113 PATENT DATE: 20050811 WPI ACCESSION NO.: 2005-541764 (200555)

PRIORITY APPLIC. NO.: KR 7528 APPLIC. DATE: 20040205

NATIONAL APPLIC. NO.: US 49844 APPLIC. DATE: 20050204

LANGUAGE: English

ABSTRACT: DERWENT ABSTRACT: NOVELTY - A microorganism capable of producing L-threonine and having an inactivated tyrR gene, is new. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a method for producing an L- threonine - producing microorganism; and (2) a method for producing L-threonine. BIOTECHNOLOGY - Preferred Microorganism: The microorganism belongs to the Enterobacteriaceae family. The microorganism is Escherichia coli. It is resistant to L-methionine, L-threonine and L-lysine analogues and alpha-aminobutyric acid, and has a nutritional requirement for methionine and a leaky requirement for isoleucine. The L-methionine analogue is D,L-methionine, Norleucine, alpha-methylmethionine or L-methionine-D,L-sulfoximine. The L-threonine analogue is alpha-amino-beta-hydroxy valeric acid or D,L-threonine hydroxamate. The L-lysine analogue is S-(2-aminoethyl)-L-cysteine or delta-methyl-L-lysine. At least one copy of phosphoenol pyruvate carboxylase (ppc) gene and thrA, thrB, and thrC genes are inserted into a chromosomal DNA, in addition, to intrinsic ppc gene and thrA, thrB and thrC genes. The microorganism is E. coli FTR7624 (KCCM-10538). Preferred Method: Producing an L- threonine - producing microorganism comprises preparing an inactivated tyrR gene or its DNA fragment; introducing the inactivated tyrR gene or its DNA fragment into a microorganism capable of producing L-threonine to cause recombination with a tyrR gene present on a chromosome of the microorganism; and selecting microorganisms having an inactivated tyrR gene. The inactivated tyrR gene or its DNA fragment is prepared by inserting a cassette

Could not find author search db7 patenting

Untitled
containing an antibiotic marker (loxpKAN) into a tyrR gene. Producing L-threonine comprises culturing the above microorganism and isolating L-threonine from the culture. USE - The microorganism and methods are useful for producing L-threonine, which may be utilized as a feed or food additive, or as a pharmaceutical and raw material for synthesizing drugs. (9 pages)

DESCRIPTORS: recombinant L-threonine prep., Escherichia coli FTR7624, tyrR gene, gene inactivation, prep., appl., feed-additive bacterium amino acid alcohol (24, 38)

SECTION: OTHER CHEMICALS-Stereospecific Compounds-GENETIC TECHNIQUES and APPLICATIONS-Gene Expression Techniques and Analysis; AGRICULTURAL BIOTECHNOLOGY-Other-FOOD and FOOD-ADDITIVES-Food and Food-Additives; BIOMANUFACTURING and BIOCATALYSIS-Fermentation

20/9/24 (Item 15 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
(c) 2006 The Thomson Corp. All rts. reserv.

0342048 DBR Accession No.: 2004-14340 PATENT

New L- threonine - producing microorganism in which the fadR gene has been knocked out, useful for producing high yields of L-threonine, as a feed and food additive, or as a pharmaceutical raw material for synthesizing some drugs - bacterium gene knockout for strain improvement and L-amino acid preparation

AUTHOR: PARK Y H; LEE J H; LEE B C; KIM D C; CHO J Y

PATENT ASSIGNEE: CJ CORP 2004

PATENT NUMBER: EP 1408123 PATENT DATE: 20040414 WPI ACCESSION NO.: 2004-307084 (2004)

PRIORITY APPLIC. NO.: KR 62103 APPLIC. DATE: 20021011

NATIONAL APPLIC. NO.: EP 2003256302 APPLIC. DATE: 20031007

LANGUAGE: English

ABSTRACT: DERWENT ABSTRACT: NOVELTY - An L- threonine - producing microorganism in which the fadR gene of the microorganism has been knocked out, is new. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) a method for producing an L- threonine - producing microorganism in which the fadR gene has been knocked out; and (2) a knockout cassette of the fadR gene or its DNA fragment comprising an antibiotic marker inserted within the fadR gene such that it is knocked out. BIOTECHNOLOGY - Preferred Microorganism: The microorganism is Escherichia coli, specifically Escherichia coli FTR 1201 (KCCM-10422). The microorganism is resistant to L-methionine, L-threonine and L-lysine analogs and alpha-aminobutyric acid, and has a nutritional requirement for methionine and a leaky requirement for isoleucine. The DNA contains at least one additional copy of the ppc gene, the thrA gene, thrB gene, the thrC gene or a combination of these. Preparation: The L- threonine - producing microorganism in which the fadR gene has been knocked out is produced by introducing a knockout cassette of the fadR gene or its DNA fragment into an L- threonine - producing strain to cause homologous recombination to occur between the cassette and the fadR gene of the microorganism, and selecting a mutated microorganism in which the fadR gene has been rendered knocked-out. The cassette in which the DNA fragment of knocked-out fadR gene cassette is DELTAfadR::loxpcat. Microorganism. The method further comprises isolating the L-threonine from the culture. USE - The L- threonine - producing microorganism in which the fadR gene of the microorganism has been knocked out is useful in producing high yields of L-threonine, which may be used as a feed and food additive, or as a pharmaceutical raw material for synthesizing some drugs. ADVANTAGE - The L- threonine - producing microorganism in which the fadR gene of the microorganism has been knocked out produces higher yields of L-threonine than prior strains. EXAMPLE - Genomic DNA was extracted from threonine - producing E. coli strain KCCM 10236. A

get paper

could not search

Untitled

LANGUAGE: JA

ABSTRACT: A new variant phosphoenolpyruvate - carboxylase (PEPC, EC-4.1.1.31) which does not show feedback inhibition by aspartic acid may be obtained from Escherichia coli after mutagenesis with 3-bromopyruvic acid, aspartic acid beta-hydrazide of DL-threo-beta-hydroxyaspartic acid. DNA encoding the PEPC variant, a vector with the DNA and a transformant E. coli or coryneform with the vector are also new. The PEPC may have the following mutations: Glu to Lys at 625; Arg to His at 222 and Glu to Lys at 223; Ser to Phe at 288, Glu to Lys at 289, Met to Ile at 551 and Glu to Lys at 804; Ala to Thr at 867; Arg to Cys at 438; or Lys to Ser at 620. The variant PEPC or recombinant bacterium may be used in efficient production of amino acids, such as L-lysine, L-threonine, L-methionine, L-isoleucine, L-glutamic acid, L-arginine or L-proline. In an example, the PEPC gene in plasmid pS2 was subcloned in E. coli HB101 and subjected to mutagenesis. E. coli AJ-12907 (FERM BP-4734), AJ-12908 (FERM BP-4735), AJ-12909 (FERM BP-4736) and AJ-12910 (FERM BP-4737) were obtained. AJ-12907 produced 16.8 g/l threonine, compared with 15.8 g/l for E. coli (pS2). (77pp)

E.C. NUMBERS: 4.1.1.31

DESCRIPTORS: Escherichia coli recombinant phosphoenolpyruvate - carboxylase mutant prep., enzyme engineering, reduced aspartic acid feedback inhibition, expression in E. coli, appl. amino acid over-prep. bacterium EC-4.1.1.31 protein engineering mutagenesis strain improvement gene cloning vector (Vol.14, No.10)

SECTION: BIOCATALYSIS-Isolation and Characterization; GENETIC ENGINEERING AND FERMENTATION-Nucleic Acid Technology; FOOD-Food and Food Additives; BIOCATALYSIS-Application; GENETIC ENGINEERING AND FERMENTATION-Fermentation (K1,A1,F1,K2,A2)

20/9/94 (Item 85 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
(c) 2006 The Thomson Corp. All rts. reserv.

0049201 DBR Accession No.: 86-07049 PATENT

~~Fermentative production of amino acid - using coryneform bacteria with two recombinant plasmid vectors containing enzyme genes~~

PATENT ASSIGNEE: Ajinomoto 1986

PATENT NUMBER: EP 179338 PATENT DATE: 860430 WPI ACCESSION NO.: 86-114324 (8618)

PRIORITY APPLIC. NO.: JP 84208677 APPLIC. DATE: 841004

NATIONAL APPLIC. NO.: EP 85112621 APPLIC. DATE: 851004

LANGUAGE: English

ABSTRACT: A process for the production of L amino acid (I) comprises inserting a gene coding for an enzyme E1 utilized in the biosynthesis of (I) into a plasmid vector P1, inserting a gene coding for a 2nd enzyme E2 into plasmid vector P2, and then introducing the recombinant vectors into a coryneform bacterium strain and culturing the transformants. E1 and E2 are different enzymes, each highly rate-determining in biosynthesis of (I). P1 and P2 have compatible replicating origins different from each other. More specifically, for threonine production, E1 is phosphoenolpyruvate - carboxylase (EC-4.1.1.31) or homoserine-kinase (EC-2.7.1.39) and E2 is homoserine-dehydrogenase (EC-1.1.1.3). For tryptophan production, E1 is a combination of shikimate-kinase (EC-2.7.1.71) and 3-dehydroquinate-synthetase (EC-4.6.1.3) and E2 is tryptophan-synthase (EC-4.2.1.20). Suitable plasmid vectors include pAM330, pAM1519, pAJ655, pAJ611 and pAJ1844. Suitable hosts include Brevibacterium and Corynebacterium strains producing L-glutamic acid. (51pp)

E.C. NUMBERS: 4.1.1.31; 2.7.1.39; 1.1.1.3; 2.7.1.71; 4.6.1.3; 4.2.1.20

DESCRIPTORS: amino acid prep. e.g. threonine prep., tryptophan prep., 2 biosynth. enzyme cloning in 2 vector plasmid, coryneform bacterium

How do you search?

could not get

Untitled

e.g. Brevibacterium, Corynebacterium transformation
phosphoenolpyruvate - carboxylase homoserine-kinase
homoserine-dehydrogenase shikimate-kinase 3-dehydroquinate-synthase
tryptophan-synthase EC-2.7.1.39 EC-1.1.1.3 EC-2.7.1.71 EC-4.2.1.20
EC-4.6.1.3

SECTION: Food-Food Additives and SCP; Biocatalysis-Isolation and
Characterization; Microbiology-Genetics (F1,K1,A1)

20/9/95 (Item 86 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res..
(c) 2006 The Thomson Corp. All rts. reserv.

0037892 DBR Accession No.: 85-08681 PATENT

Recombinant DNA containing phosphoenolpyruvate - carboxylase gene -
useful in Corynebacterium or Brevibacterium for improved amino acid
production

PATENT ASSIGNEE: Ajinomoto 1985

PATENT NUMBER: EP 143195 PATENT DATE: 850605 WPI ACCESSION NO.: 85-136176
(8523)

PRIORITY APPLIC. NO.: JP 83157512 APPLIC. DATE: 830829

NATIONAL APPLIC. NO.: EP 84110141 APPLIC. DATE: 840824

LANGUAGE: English

ABSTRACT: A recombinant DNA molecule (I) comprising a plasmid vector and
a gene encoding phosphoenolpyruvate - carboxylase (PEPC)
(EC-4.1.1.31) operatively inserted in it is described. (I) is capable
of propagation in, and the gene is capable of expression in, a
Corynebacterium or Brevibacterium strain. The recombinant DNA gives
increased production of amino acids such as lysine, threonine and
isoleucine from aspartic acid, as the PEPC improves the formation of
metabolic aspartic acid on cultivation of the bacteria . In an
example, chromosomal DNA containing a PEPC gene was obtained from
Brevibacterium lactofermentum ATCC 13869, and with pAJ43 as a vector,
the DNA was obtained from pAJ655 and pBR325. Brevibact. lactofermentum
AJ 12061 in which the PEPC activity was reduced to 50% was used as a
recipient for cloning of the PEPC gene. Transformation and
retransformation etc. gave strains producing glutamic acid in improved
yields. (48pp)

E.C. NUMBERS: 4.1.1.31

DESCRIPTORS: enhanced amino acid e.g. glutamic acid prep.,
phosphoenolpyruvate - carboxylase gene cloning Brevibact.
lactofermentum Corynebact. etc. transformation

SECTION: Food-Food Additives and SCP; Microbiology-Genetics (F1,A1)

?

7 how do you search

could not get

Untitled

DESCRIPTORS: L-threonine, L-isoleucine prep., purification, novel
Escherichia coli sp., e.g. plasmid pMW118::aspA vector, HPLC,
phosphoenolpyruvate - carboxylase, e.g. transhydrogenase act.
enhancement, polymerase chain reaction amino acid alcohol bacterium
strain improvement fermentation chromatography enzyme EC-4.1.1.31 DNA
amplification hybridization (21, 42)
SECTION: FOOD and FOOD-ADDITIVES-Food and Food-Additives-GENETIC TECHNIQUES
and APPLICATIONS-Gene Expression Techniques and Analysis;
BIOMANUFACTURING and BIOCATALYSIS-Fermentation-BIOMANUFACTURING and
BIOCATALYSIS-Biocatalyst Application

20/9/90 (Item 81 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
(c) 2006 The Thomson Corp. All rts. reserv.

0197655 DBR Accession No.: 96-07796 PATENT
DNA containing B. flavum MJ-233 phosphoenolpyruvate - carboxylase gene -
Brevibacterium flavum gene cloning and expression for e.g. amino
acid production
CORPORATE SOURCE: Japan.
PATENT ASSIGNEE: Mitsubishi-Chem. 1996
PATENT NUMBER: JP 8066189 PATENT DATE: 960312 WPI ACCESSION NO.:
96-195282 (9620)
PRIORITY APPLIC. NO.: JP 94206883 APPLIC. DATE: 940831
NATIONAL APPLIC. NO.: JP 94206883 APPLIC. DATE: 940831
LANGUAGE: JA

*Search
Japanese Patent*

ABSTRACT: A new DNA fragment contains a gene encoding phosphoenolpyruvate
- carboxylase (PEPC , EC-4.1.1.31) from Brevibacterium flavum MJ-233.
The gene may be cloned and expressed to produce a transformant with
improved PEPC activity, which may be used in production of useful
compounds, e.g. amino acids, using cells or enzyme extract. In an
example, DNA from MJ-233 was extracted, and a clone with a 3.3-kb
insert (plasmid pUC118- ppc) was produced and sequenced. The insert
was subcloned in plasmid pBY503 from Brevibacterium stationis IFO
12144, to form plasmid pCRY30, and the vector was modified further to
give plasmid pCRY- ppc , which was used to transform MJ-233. After cell
disintegration, a crude extract with a 6-fold increased PEPC activity
over the wild-type was obtained. (12pp)
E.C. NUMBERS: 4.1.1.31
DESCRIPTORS: Brevibacterium flavum recombinant phosphoenolpyruvate -
carboxylase prep., expression vector, DNA sequence, appl. e.g. amino
acid prep. bacterium enzyme EC-4.1.1.31 protein sequence gene
cloning strain improvement (Vol.15, No.13)
SECTION: BIOCATALYSIS-Isolation and Characterization; GENETIC ENGINEERING
AND FERMENTATION-Nucleic Acid Technology; FOOD-Food and Food Additives
(K1,A1,F1)

20/9/91 (Item 82 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
(c) 2006 The Thomson Corp. All rts. reserv.

0181873 DBR Accession No.: 95-06090 PATENT
Variant of phosphoenolpyruvate - carboxylase - enzyme engineering for
reduced aspartic acid feedback inhibition; expression in Escherichia
coli for improved amino acid production
AUTHOR: Sugimoto M; Suzuki T; Matsui H; Izui K
PATENT ASSIGNEE: Ajinomoto 1995
PATENT NUMBER: WO 9506114 PATENT DATE: 950302 WPI ACCESSION NO.:
95-106843 (9514)
PRIORITY APPLIC. NO.: JP 94153876 APPLIC. DATE: 940705
NATIONAL APPLIC. NO.: WO 94JP1365 APPLIC. DATE: 940817

Untitled

DNA fragment of the fadR gene including the open reading frame was PCR amplified using the extracted genomic DNA as a template. PCR product was then loaded on 1.0% agarose gel and subjected to electrophoresis. resulting fadR gene was ligated to the EcoRV site of cloning vector pT7Blue to construct the recombinant plasmid vector pT7Blue/fadR, which was then transformed into E. coli NM522 and plated overnight. Formed colonies were inoculated on liquid media containing carbenicillin, incubated overnight, and plasmid DNAs were extracted. DNA extract was digested with restriction enzyme, cleaved with SacII, and resulting fragment was blunt-end ligated to construct recombinant plasmid pT7DELTAfadR::loxpcat. E. coli NM522 was transformed with pT7DELTAfadR::loxpcat. Resulting transformant was streaked on a solid medium plate, cultured overnight, and colonies formed were picked and inoculated on liquid medium. After overnight culturing, plasmid DNAs were extracted, digested, and run on 0.7% agarose gel. A band about 2.2 kb was cut of the gel, eluted and transformed into E. coli KCCM 10236 by electroporation. Transformants were cultured on Lb agar medium and titration results show that about 24-25 g/liter L-threonine was produced. (13 pages)

DESCRIPTORS: recombinant fadR protein gene knockout mutant Escherichia coli construction, plasmid-mediated gene transfer, expression in host cell, thrA, thrB, thrC additional gene copy, appl. strain improvement, L-threonine prep., feed, food additive, pharmaceutical raw material, drug manufacture bacterium fermentation amino acid alcohol (23, 30)
SECTION: PHARMACEUTICALS-Other Pharmaceuticals-GENETIC TECHNIQUES and APPLICATIONS-Gene Expression Techniques and Analysis; FOOD and FOOD-ADDITIVES-Food and Food-Additives-BIOMANUFACTURING and BIOCATALYSIS-Fermentation

20/9/55 (Item 46 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
(c) 2006 The Thomson Corp. All rts. reserv.

0305251 DBR Accession No.: 2003-07036 PATENT
Producing target substance e.g. L-amino acid, by culturing a mutant or recombinant microorganism in a culture medium to produce and accumulate target substance, and collecting target substance from the culture - L- amino acid production by recombinant Escherichia coli culture

AUTHOR: TSUJIMOTO N; SUZUKI T; ITO H
PATENT ASSIGNEE: AJINOMOTO CO INC 2002
PATENT NUMBER: EP 1254957 PATENT DATE: 20021106 WPI ACCESSION NO.:
2003-122504 (200312)

PRIORITY APPLIC. NO.: JP 2001135517 APPLIC. DATE: 20010502
NATIONAL APPLIC. NO.: EP 20028316 APPLIC. DATE: 20020411
LANGUAGE: English

ABSTRACT: DERWENT ABSTRACT: NOVELTY - Producing (M) a target substance (I) utilizing a microorganism (II), involves culturing (II) in a medium and collecting (I) from the culture, where (II) is a mutant or recombinant strain of a microorganism in which maltose assimilation is controlled by an interaction between IIAGlc protein of glucose phosphoenolpyruvate -sugar phosphotransferase (PTS) and a protein involved in non-PTS uptake of maltose. DETAILED DESCRIPTION - (M) involves culturing (II) in a medium to produce and accumulate (I) in the medium and collecting (I) from the culture, where (II) is a mutant or recombinant strain of microorganism in which maltose assimilation is controlled by an interaction between IIAGlc protein (P1) of glucose phosphoenolpyruvate -sugar phosphotransferase (PTS) and a protein (P2) involved in non-PTS uptake of maltose, and the interaction between IIAGlc protein and a protein involved in non-PTS uptake of maltose of the mutant or recombinant strain is reduced or eliminated, and the strain can take up glucose and maltose. BIOTECHNOLOGY - Preferred

Untitled

Method: P2 is a maltose carrier protein e.g. MalK protein, having an ATP decomposition activity. The interaction between P1 and P2 is reduced or eliminated, because the MalK protein contained in the microorganism has a mutation selected from a mutation for substituting a Thr residue for the Ala residue at a position of 124 and a mutation for substituting a Gln residue for the Leu residue at a position of 327. Alternately, the interaction between IIAGlc protein and P2 is reduced or eliminated because P1 contained in the microorganism has a mutation selected from a mutation for substituting a Ser residue for the Gly residue at a position of 47 and a mutation substituting a Thr residue for the Ala residue at a position of 76. (II) is a Escherichia bacterium. USE - (M) is useful for producing a target substance such as an L-amino acid e.g. L-lysine, L-threonine and L-phenylalanine (claimed). (M) is useful for producing various target substances including amino acids, nucleic acids such as guanylic acid and inosinic acid, vitamin, antibiotic, growth factor and bioactive substances. EXAMPLE - pVIC40 (WO 90/04636), pCABD2 (WO95/16042) and pMGAL1 were each introduced into an Escherichia coli W3100 (tyrA)malK327, and abilities to produce L-lysine, L-threonine and L-phenylalanine were investigated for each strain. pVIC40 was a plasmid containing the threonine operon and was prepared from E.coli VKPM B-3996 strain harboring the plasmid (WO 90/04636). pCABD2 contained DNA (dap A asterisk 24) coding for dihydrodipicolinate synthase (DDPS) derived from E.coli and having a mutation for eliminating the feedback inhibition by L-lysine, DNA (lys C asterisk 80) coding for aspartokinase III derived from E.coli and having a mutation for eliminating the feedback inhibition by L-lysine, DNA (dapB) coding for dihydrodipicolinate reductase derived from E.coli, and DNA (ddh) coding for diaminopimelate dehydrogenase derived from Brevibacterium lactofermentum (WO 95/16042). pMGAL1 contained a gene coding for 3-deoxy-Darabinohepturonate-7-phosphate synthase derived from Escherichia bacterium of which feedback inhibition was eliminated, and a gene coding for chorismate mutaseprephenate dehydratase derived from Escherichia bacterium of which feedback inhibition was eliminated. E.coli W3100 (tyrA)malK327 was transformed with each plasmid by the method of Hanahan et al. Each obtained transformant was inoculated into 5 ml of L medium containing 50 micro g/ml of streptomycin and cultured at 37 degrees C overnight with shaking. Then, the culture broth was applied in an amount of 50 micro l to L agar medium containing 50 micro g/ml of streptomycin and cultured overnight at 37 degrees C. An amino acid production medium containing a mixture of glucose and maltose (36 g/l glucose, 5.8 g/l of maltose) as the carbon source in a volume of 20 ml was introduced into a 500 ml volume Sakaguchi flask, and 1/8 of the cells grown on the aforementioned agar medium was scraped and inoculated into the medium. After completion of the culture, concentration of each amino acid and remaining glucose and maltose were quantified. As controls, transformants obtained by introducing each of the plasmids into E.coli W3100 (tyrA) were used. When E.coli W3100 (tyrA) was used as the host, maltose was not assimilated yet when glucose was consumed. On the other hand, when E.coli W3100 (tyrA)malK327 was used as the host, maltose was assimilated within a similar culture time, and thus it was found that consumption of maltose was not suffered from the glucose repression. Further, the E.coli W3100 (tyrA)malK327 strains harboring each of pVIC40, pCABD2 and pMGAL1 showed improved L-lysine, L-threonine and L-phenylalanine producing abilities compared with the E.coli W3100 (tyrA) strains harboring each of the plasmids. (19 pages)

DESCRIPTORS: L-lysine, L-threonine, L-phenylalanine prep., plasmid pVIC40, plasmid pCABD2, plasmid pMGAL1-mediated threonine operon, dihydrodipicolinate-synthase, aspartate-kinase-III culture gene transfer, expression in Escherichia coli, maltose utilization, appl. strain improvement amino acid alcohol arene enzyme EC-4.2.1.52 EC-2.7.2.4 bacterium fermentation sugar (22, 12)

Untitled

SECTION: FOOD and FOOD-ADDITIVES-Food and Food-Additives-GENETIC TECHNIQUES
and APPLICATIONS-Gene Expression Techniques and Analysis;
BIOMANUFACTURING and BIOCATALYSIS-Fermentation

20/9/57 (Item 48 from file: 357)
DIALOG(R) File 357: Derwent Biotech Res.
(c) 2006 The Thomson Corp. All rts. reserv.

0302254 DBR Accession No.: 2003-04039 PATENT

Producing L-threonine using a microorganism, in which one or more copies of
phosphoenolpyruvate carboxylase gene and threonine operon are
additionally integrated into chromosomal DNA of the microorganism -
amino acid production from recombinant Escherichia coli fermentation

AUTHOR: NOH K; KIM Y; PARK J; KIM D; LEE J; OK S

PATENT ASSIGNEE: CHEIL JEDANG CO. 2002

PATENT NUMBER: WO 200264808 PATENT DATE: 20020822 WPI ACCESSION NO.:
2002-706922 (200276)

PRIORITY APPLIC. NO.: KR 6976 APPLIC. DATE: 20010213

NATIONAL APPLIC. NO.: WO 2002KR230 APPLIC. DATE: 20020214

LANGUAGE: English

ABSTRACT: DERWENT ABSTRACT: NOVELTY - Producing L-threonine using a
microorganism, in which one or more copies of each of the
phosphoenolpyruvate carboxylase (ppc) gene and the threonine operon are
additionally integrated into a particular site of the chromosomal DNA
of the microorganism, while its inherent ppc gene and threonine operon
remain. DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included
for Escherichia coli strain pGmTN-PPC12, Accession No. KCCM 10236
capable of L-threonine production. BIOTECHNOLOGY - Preferred Method:
The ppc gene and the threonine operon to be additionally integrated in
the microorganism (preferably E.coli) are derived from a microorganism
resistant to threonine analogs, lysine analogs, isoleucine analogs and
methionine analogs. The ppc gene and the threonine operon are
additionally integrated into the lacZ gene site of the chromosomal DNA.
The microorganism is preferably constructed with recombinant plasmid
pGmTN-PPC. Most preferably the ppc gene obtained from chromosome of
threonine producing E.coli strain, TF4076 (Accession No. KFCC 10718) by
polymerase chain reaction and the threonine operon cloned from the
E.coli strain are incorporated into the chromosome of the host strain
E.coli TF4076. USE - For producing L-threonine using a microorganism,
preferably E.coli (claimed). ADVANTAGE - The method results in markedly
increased L-threonine productivity. EXAMPLE - Cloning of
phosphoenolpyruvate carboxylase (PPC) gene was carried out as follows.
The ppc gene was obtained from a threonine producing strain, TF 4076.
Chromosomal DNA was isolated, digested with restriction enzyme SalI,
and subjected to electrophoresis to selectively isolate 4-5 kb DNA
fragments. The ppc gene was amplified by using primer 1
(5'-aggaattcttccgcagcatttgacgtcac-3') and primer 2 (5'-aggaagcttttagccgg
tattacgcatacc-3'). The amplified product was digested with EcoRI and
HindIII and subjected again to electrophoresis to finally isolate a 2.8
kb ppc gene fragment. A 7.6 kb pBRINT-TsGm was used for cloning.
pBRINT-TsGm was double digested and ligated with the isolated ppc gene.
Escherichia coli strain DH5alpha was transformed with the ligated DNA
by electroporation and cultured on LB solid medium containing
antibiotics, 50 mg/L of carbenicillin and 5 mg/L of gentamycin. Next,
single colonies were collected. Single colonies were cultivated on LB
media containing the same antibiotics to isolate plasmids from the
grown strains. The size of each plasmid was primarily identified and
double digested with EcoRI and HindIII to isolate a 2.8 kb DNA
fragment. The resulting DNA fragments were identified to thereby
complete construction of a recombinant plasmid pGmPPC (10.7 kb)
containing the ppc gene. Recombinant plasmid vector pAT94 constructed
by cloning with the chromosomal DNA of TF4076, was used for the

Untitled

threonine operon, and recombinant plasmid pGmPPC was used for the ppc gene. pBRINT-TsGm was used as a chromosomal DNA integration vector. PAT94 was double digested with restriction enzymes HindIII and BamHI and 6.4 kb threonine operon DNA fragments were isolated from the double digest by electrophoresis. pGmPPC was double digested with HindIII and EcoRI to isolate 2.8 kb ppc gene fragments. pBRINT-TsGm plasmid vector was digested with EcoRI and BamHI, and completely digested DNA fragments were isolated. The resulting plasmid vector digest, isolated threonine operon DNA fragments, and ppc gene fragments were mixed and ligated. E.coli strain DH5alpha was transformed with the ligated product by electroporation and cultured on LB solid medium containing antibiotics, 50 mg/L of carbenicillin and 5 mg/l of gentamycin. Next, single colonies were collected which were cultivated on LB media to isolate plasmids from the grown strain. The plasmid was primarily identified and double digested with EcoRI and BamHI to isolate 9.2 kb and 7.9 kb DNA fragments. The resulting DNA fragments were identified to thereby complete construction of a recombinant plasmid pGmTN-PPC (17.1 kb) containing the threonine operon and ppc gene. TF4076, a threonine producing strain, was transformed with the recombinant plasmid pGmTN-PPC isolated from E.coli strain DH5alpha, cultured on LB solid medium containing 5 mg/L of gentamycin, and cultivated for 60 hours at 30 degrees C. Each single colony was inoculated into 0.5 ml of LB and incubated for 4 hours at 30 degrees C. An aliquot of the culture was transferred into 10 ml of LB, incubated for 6 hours at 30 degrees C and then overnight at 37 degrees C. A 10 to the power of -3 to 10 to the power of -6 dilution of the culture was inoculated on LB solid medium containing 5 mg/l of gentamycin. At this time, 12 microliters of isopropylthiogalactoside (IPTG) and 60 microliters of X-gal were also inoculated on the LB solid medium. After 24-hour incubation at 44 degrees C, recombinant strains were screened for white colonies sensitive to carbenicillin. The screened recombinant strains confirmed the presence of the expected plasmids, in which the ppc gene and threonine operon were integrated into the lacZ gene site of the chromosomal DNA of each strain. Thirty single colonies of the recombinant strains with recombinant plasmids integrated into their chromosome were screened for threonine productivity comparisons using threonine titer media Erlenmeyer flasks. Colonies were cultured on LB solid media overnight in a 32 degrees C incubator. All thirty colonies of recombinant strains showed excellent productivity, including eight colonies that produced 26 g/l or greater threonine, compared to the host strain, TF 3076, which produced 20 g/l of threonine. The recombinant strain, which recorded the highest threonine productivity at 27 g/l with a 35 % higher yield than the host strain, was named pGmTN-PPC12. (18 pages)

DESCRIPTORS: L-threonine prep., vector plasmid pGmTN-PPC12-mediated threonine operon, phosphoenolpyruvate-carboxylase gene transfer, expression in Escherichia coli cell culture, cloning, polymerase chain reaction, DNA primer amino acid alcohol enzyme EC-4.1.1.31 bacterium strain improvement fermentation DNA amplification hybridization (22, 8)
SECTION: FOOD and FOOD-ADDITIVES-Food and Food-Additives-GENETIC TECHNIQUES and APPLICATIONS-Gene Expression Techniques and Analysis;
BIOMANUFACTURING and BIOCATALYSIS-Fermentation

20/9/66 (Item 57 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
(c) 2006 The Thomson Corp. All rts. reserv.

0291939 DBR Accession No.: 2002-13786 PATENT
New bacterium belonging to genus Escherichia, useful for producing L-threonine or L-isoleucine, in which intracellular phosphoenolpyruvate carboxylase activity and transhydrogenase activity are enhanced - amino acid production and purification

Untitled

from novel *Escherichia coli* with enhanced enzyme activity

AUTHOR: MIYATA Y; NAKAI Y; NAKANISHI K; ITO H; KOJIMA H; KURAHASHI O

PATENT ASSIGNEE: AJINOMOTO KK 2002

PATENT NUMBER: EP 1179597 PATENT DATE: 20020213 WPI ACCESSION NO.:

2002-229928 (200229)

PRIORITY APPLIC. NO.: JP 2000244921 APPLIC. DATE: 20000811

NATIONAL APPLIC. NO.: EP 2001118456 APPLIC. DATE: 20010731

LANGUAGE: English

ABSTRACT: DERWENT ABSTRACT: NOVELTY - A bacterium (I) belonging to the genus *Escherichia*, having an ability to produce L-threonine or L-isoleucine, and in which intracellular phosphoenolpyruvate carboxylase activity and transhydrogenase activity are enhanced, is new. BIOTECHNOLOGY - Preferred Bacterium: In (I), the activity of enzyme(s) encoded by threonine operon consisting of thrABC, or its part is enhanced, and (I) has L-threonine producing ability. The activity of enzyme(s) encoded by ilv operon (where ilvA gene codes for threonine deaminase) or its part is enhanced, and (I) has L-isoleucine producing activity. In (I), the aspartate activity is also enhanced, and the activity of each enzyme is enhanced by increasing copy number of a gene or operon coding for each enzyme, or modifying an expression regulatory sequence so that intracellular expression of the gene or operon should be enhanced. The gene is derived from a bacterium belonging to the genus *Escherichia*. USE - (I) is useful for producing L-threonine or L-isoleucine, by culturing (I) in a medium (claimed). EXAMPLE - Plasmid containing ilvGMEDA operon (containing ilvG, ilvM, ilvE, ilvD or ilvA genes), aspA gene (aspartate ammonia-lyase), pntAB gene (coding for transhydrogenase (THY)), and ppc gene (coding for phosphoenolpyruvate carboxylase (PEPC)) (PMWD5-APT) was produced. A DNA fragment containing the aspA gene was amplified by polymerase chain reaction (PCR) and the obtained amplified fragment was inserted into the SmaI cleavage site of pmw118 (Nippon gene) to obtain pmw118::aspA. The plasmid pmw::THY contained the pntAB gene described in WO95/11985. pmw118::aspA was digested with SacI and the both ends were blunt-ended. It was further digested with HindIII to obtain a DNA fragment containing aspA. Then, ppc was digested with XbaI, and the both ends were blunt-ended. It was further digested with HindIII, and inserted with the DNA fragment containing aspA at the cleavage site to obtain pAPW. A DNA fragment containing pntAB was obtained by digesting pmw::THY with SmaI and HindIII. Then, pAPW was digested with XbaI, and both ends were blunt-ended. It was further digested with HindIII and inserted with pntAB at the cleavage site to obtain pAPT. A DNA fragment containing ilvGMEDA operon was prepared from the plasmid pmwD5 containing the ilvGMED operon, described in WO96/26289. The plasmid pmwD5 derived from vector pmw119 (Nippon gene) harbored the ilvGMEDA operon in which the region necessary for attenuation was deleted. pAPT was digested with SacI and HindIII, and blunt-ended to obtain a DNA fragment containing ppc, pntAB and aspA. pmwD5 was digested with AflII, blunt-ended and inserted at the cleavage site with the above DNA fragment containing ppc, pntAB, and aspA to obtain pmwD5-APT. The plasmid was introduced into *Escherichia coli* VKPM B-3996 and cultured. The culture was performed in a medium for L-isoleucine production (containing glucose (40 g), ammonium sulfate (16 g), monopotassium phosphate (1 g), magnesium sulfate heptahydrate (1 g), ferrous sulfate heptahydrate (0.01 g), manganese chloride tetrahydrate (0.01 g), yeast extract (2 g) and calcium carbonate (40 g) in water (1 l), pH 7) at 37 degrees C for 24 hours. L-isoleucine contained in the medium was quantified by high performance liquid chromatography. The results showed that in L-threonine producing bacteria belonging to the genus *Escherichia*, L-isoleucine productivity was improved by enhancing intracellular THY and PEPC activity. Further, it was also found that L-isoleucine productivity was further improved by enhancing AspA activity. By introducing the plasmid pmwD5-APT, the strain B-3996 accumulated 11.2 g/l of L-isoleucine. (24 pages)

Untitled

File 50:CAB Abstracts 1972-2006/Sep
(c) 2006 CAB International
File 64:Environmental Engineering Abstracts 1966-2006/Sep
(c) 2006 CSA.
File 65:Inside Conferences 1993-2006/Oct 05
(c) 2006 BLDSC all rts. reserv.
File 94:JICST-EPlus 1985-2006/Jul w1
(c)2006 Japan Science and Tech Corp(JST)
File 98:General Sci Abs 1984-2006/Oct
(c) 2006 The HW Wilson Co.
File 99:Wilson Appl. Sci & Tech Abs 1983-2006/Jul
(c) 2006 The HW Wilson Co.
File 143:Biol. & Agric. Index 1983-2006/Jul
(c) 2006 The HW Wilson Co
File 144:Pascal 1973-2006/Sep w2
(c) 2006 INIST/CNRS
File 203:AGRIS 1974-2006/Jul
Dist by NAL, Intl Copr. All rights reserved
File 235:AGROProjects 1990- 2006/Q3
(c) 2006 Informa UK Ltd
File 266:FEDRIP 2006/Aug
Comp & dist by NTIS, Intl Copyright All Rights Res
File 306:Pesticide Fact File 2003/Sep
(c) 2003 BCPC
File 357:Derwent Biotech Res. _1982-2006/Oct w2
(c) 2006 The Thomson Corp.
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
(c) 2006 The Thomson Corp

Set	Items	Description
-----	-------	-------------

? s coli or escherichia or bacter?; s pckA or ppc or phosphoenolpyruvate or pepc or pyruvate (w) carboxylase or pep; s tdcB or threonine (w) dehydratase or serine (w) dehydratase or threonine (w) deaminase; s tdcC or threonine (w) serine (w) transporter; s thrA; s thrB; s thrC

Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing

Processed 10 of 20 files ...

Processing

Processed 20 of 20 files ...

Completed processing all files

```

1014594 COLI
956308 ESCHERICHIA
3927811 BACTER?
S1 4320007 COLI OR ESCHERICHIA OR BACTER?
207 PCKA
6909 PPC
31672 PHOSPHOENOLPYRUVATE
3490 PEPC
103562 PYRUVATE
65339 CARBOXYLASE
6798 PYRUVATE(W) CARBOXYLASE
16637 PEP
S2 56133 PCKA OR PPC OR PHOSPHOENOLPYRUVATE OR PEPC OR PYRUVATE
(W) CARBOXYLASE OR PEP

```


Untitled

135 TDCB
 92779 THREONINE
 16583 DEHYDRATASE
 1116 THREONINE(W)DEHYDRATASE
 227825 SERINE
 16583 DEHYDRATASE
 1348 SERINE(W)DEHYDRATASE
 92779 THREONINE
 38671 DEAMINASE
 815 THREONINE(W)DEAMINASE
 S3 3134 TDCB OR THREONINE (W) DEHYDRATASE OR SERINE (W)
 DEHYDRATASE OR THREONINE (W) DEAMINASE
 97 TDCC
 92779 THREONINE
 227825 SERINE
 145390 TRANSPORTER
 0 THREONINE(W)SERINE(W)TRANSPORTER
 S4 97 TDCC OR THREONINE (W) SERINE (W) TRANSPORTER
 S5 281 THRA
 S6 443 THRB
 S7 165 THRC

? s inactivat? or deactivat? or attenuat? or mutat? or delet? or substit? or recomb?

Processing

Processed 10 of 20 files ...

Completed processing all files

398818 INACTIVAT?
 52535 DEACTIVAT?
 489726 ATTENUAT?
 1199925 MUTAT?
 495218 DELET?
 1081599 SUBSTIT?
 1053323 RECOMB?
 S8 4207740 INACTIVAT? OR DEACTIVAT? OR ATTENUAT? OR MUTAT? OR DELET?
 OR SUBSTIT? OR RECOMB?

? s s1 and s2 and s3 and s4 and s8

4320007 S1
 56133 S2
 3134 S3
 97 S4
 4207740 S8
 S9 1 S1 AND S2 AND S3 AND S4 AND S8

? t s9/free

>>>"FREE" is not a valid format name in file(s): 306

9/8/1 (Item 1 from file: 357)

0325190 DBR Accession No.: 2003-26331

New recombinant plasmid having a deactivated threonine dehydratase
 (tdc) gene, useful for transforming a microorganism for increased
 production of L-threonine for medical and pharmaceutical use -
 vector-mediated mutant threonine - dehydratase gene transfer and
 expression in host cell for strain improvement and L-amino acid
 preparation 2003

? t s9/2

9/2/1 (Item 1 from file: 357)

DIALOG(R)File 357:Derwent Biotech Res.

(c) 2006 The Thomson Corp. All rts. reserv.

0325190 DBR Accession No.: 2003-26331 PATENT

New recombinant plasmid having a deactivated threonine dehydratase
 (tdc) gene, useful for transforming a microorganism for increased
 production of L-threonine for medical and pharmaceutical use -

Untitled

vector-mediated mutant threonine - dehydratase gene transfer and expression in host cell for strain improvement and L-amino acid preparation

AUTHOR: PARK J; KIM D; LEE B; LEE J; CHO J; PARK Y

PATENT ASSIGNEE: CHEIL JEDANG CORP 2003

PATENT NUMBER: EP 1347057 PATENT DATE: 20030924 WPI ACCESSION NO.:

2003-733491 (200370)

PRIORITY APPLIC. NO.: KR 15380 APPLIC. DATE: 20020321

NATIONAL APPLIC. NO.: EP 2002253703 APPLIC. DATE: 20020527

LANGUAGE: English

DESCRIPTORS: recombinant mutant Escherichia coli construction, plasmid pGmTN-PPC12-mediated mutant deactivated tdcB, tdcC threonine - dehydratase, phosphoenolpyruvate - carboxylase gene transfer, expression in host cell, polymerase chain reaction, appl. strain improvement, L-threonine prep., animal feed, food manufacture, medical, pharmaceutical bacterium fermentation enzyme EC-4.1.1.31 DNA amplification amino acid alcohol (22, 47)

SECTION: FOOD and FOOD-ADDITIVES-Food and Food-Additives-GENETIC TECHNIQUES and APPLICATIONS-Gene Expression Techniques and Analysis;

BIOMANUFACTURING and BIOCATALYSIS-Fermentation-PHARMACEUTICALS-Other Pharmaceuticals

? ds

Set	Items	Description
S1	4320007	COLI OR ESCHERICHIA OR BACTER?
S2	56133	PCKA OR PPC OR PHOSPHOENOLPYRUVATE OR PEPC OR PYRUVATE (W) CARBOXYLASE OR PEP
S3	3134	TDCB OR THREONINE (W) DEHYDRATASE OR SERINE (W) DEHYDRATASE OR THREONINE (W) DEAMINASE
S4	97	TDCC OR THREONINE (W) SERINE (W) TRANSPORTER
S5	281	THRA
S6	443	THRB
S7	165	THRC
S8	4207740	INACTIVAT? OR DEACTIVAT? OR ATTENUAT? OR MUTAT? OR DELET? - OR SUBSTIT? OR RECOMB?
S9	1	S1 AND S2 AND S3 AND S4 AND S8

? s bacter?

Processing

S10	3927811	BACTER?
? s s10 and s2 and s3 and s4 and s8		
	3927811	S10
	56133	S2
	3134	S3
	97	S4
	4207740	S8
S11	1	S10 AND S2 AND S3 AND S4 AND S8

? t s11/2

11/2/1 (Item 1 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
(c) 2006 The Thomson Corp. All rts. reserv.

0325190 DBR Accession No.: 2003-26331 PATENT
New recombinant plasmid having a deactivated threonine dehydratase (tdc) gene; useful for transforming a microorganism for increased production of L-threonine for medical and pharmaceutical use - vector-mediated mutant threonine - dehydratase gene transfer and expression in host cell for strain improvement and L-amino acid preparation

AUTHOR: PARK J; KIM D; LEE B; LEE J; CHO J; PARK Y

PATENT ASSIGNEE: CHEIL JEDANG CORP 2003

PATENT NUMBER: EP 1347057 PATENT DATE: 20030924 WPI ACCESSION NO.:

2003-733491 (200370)

Untitled

PRIORITY APPLIC. NO.: KR 15380 APPLIC. DATE: 20020321
 NATIONAL APPLIC. NO.: EP 2002253703 APPLIC. DATE: 20020527
 LANGUAGE: English

DESCRIPTORS: recombinant mutant Escherichia coli construction, plasmid
 pGmTN-PPC12-mediated mutant deactivated tdcB , tdcC threonine -
 dehydratase , phosphoenolpyruvate - carboxylase gene transfer,
 expression in host cell, polymerase chain reaction, appl. strain
 improvement, L-threonine prep., animal feed, food manufacture, medical,
 pharmaceutical bacterium fermentation enzyme EC-4.1.1.31 DNA
 amplification amino acid alcohol (22, 47)

SECTION: FOOD and FOOD-ADDITIVES-Food and Food-Additives-GENETIC TECHNIQUES
 and APPLICATIONS-Gene Expression Techniques and Analysis;
 BIOMANUFACTURING and BIOCATALYSIS-Fermentation-PHARMACEUTICALS-Other
 Pharmaceuticals

? ds

Set	Items	Description
S1	4320007	COLI OR ESCHERICHIA OR BACTER?
S2	56133	PCKA OR PPC OR PHOSPHOENOLPYRUVATE OR PEPC OR PYRUVATE (W) CARBOXYLASE OR PEP
S3	3134	TDCB OR THREONINE (W) DEHYDRATASE OR SERINE (W) DEHYDRATASE OR THREONINE (W) DEAMINASE
S4	97	TDCC OR THREONINE (W) SERINE (W) TRANSPORTER
S5	281	THRA
S6	443	THRB
S7	165	THRC
S8	4207740	INACTIVAT? OR DEACTIVAT? OR ATTENUAT? OR MUTAT? OR DELET? - OR SUBSTIT? OR RECOMB?
S9	1	S1 AND S2 AND S3 AND S4 AND S8
S10	3927811	BACTER?
S11	1	S10 AND S2 AND S3 AND S4 AND S8

? s threonine or amino (w) acid? or aminoacid

Processing

Processed 10 of 20 files ...

Completed processing all files

92779 THREONINE
 1881261 AMINO
 6515159 ACID?
 1475307 AMINO(W)ACID?
 152017 AMINOACID

S12 1638859 THREONINE OR AMINO (W) ACID? OR AMINOACID

? s produc? or manufacture

Processing

Processed 10 of 20 files ...

Processing

Completed processing all files

10925007 PRODUC?
 193066 MANUFACTURE
 S1311023066 PRODUC? OR MANUFACTURE

? s s13 and s10 and s2

Processing

Processed 10 of 20 files ...

Completed processing all files

11023066 S13
 3927811 S10
 56133 S2
 S14 2896 S13 AND S10 AND S2

? s s14 and s8

2896 S14
 4207740 S8
 S15 1076 S14 AND S8

? s s15 not py>=2004

>>>One or more prefixes are unsupported

0406892 DBR Accession Number: 2006-20388 PATENT

Recombinant microorganism of Escherichia has inactivated ushA gene which reduces production of by-products of 5'-guanilic acid such as guanine and guanosine - plasmid-mediated 5'-guanilic-acid-synthase gene transfer and expression in Escherichia coli for 5-guanilic acid production

AUTHOR: PARK Y H; CHANG J Y; LEE J N; OH K H; KIM J H; OH Y S; SIM J I

PATENT ASSIGNEE: CJ CORP 2005

PATENT NUMBER: KR 2005062027 PATENT DATE: 20050623 WPI ACCESSION NO.: 2006-555057 (200657)

PRIORITY APPLIC. NO.: KR 93691 APPLIC. DATE: 20031219

NATIONAL APPLIC. NO.: KR 93691 APPLIC. DATE: 20031219

LANGUAGE: KR

ABSTRACT: DERWENT ABSTRACT: NOVELTY - A recombinant microorganism of Escherichia species having an inactivated ushA gene and a process for accumulating 5'-guanilic acid synthase in a medium by using the microorganism. The microorganism reduces production of by-products of 5'-guanilic acid such as guanine and guanosine, so that the conversion rate into 5-guanilic acid is enhanced. DETAILED DESCRIPTION - The recombinant microorganism Escherichia species GPU1114 (KCCM-10536) having the inactivated ushA gene is provided, where the Escherichia species GPU1114(KCCM-10536) is produced by transforming the Escherichia species GPD1114(KCCM-10543) with a recombinant vector pTushA:loxpcAT containing the gene ushA with an antibiotic marker gene, and selecting the Escherichia species GPU1114(KCCM-10536) having the inactivated ushA gene. The process for accumulating 5'-guanilic acid synthase in the medium comprises culturing the Escherichia species GPU1114(KCCM-10536) in the medium.

Only thing I found is
loxpcat
loxpcan

Set Items Description

S24 4 LOXPCAT

? t s24/7/2

>>>Format 7 is not valid in file 143

24/7/2 (Item 1 from file: 357)

DIALOG(R)File 357:Derwent Biotech Res.

(c) 2006 The Thomson Corp. All rts. reserv.

0406892 DBR Accession Number: 2006-20388 PATENT

Recombinant microorganism of Escherichia has inactivated ushA gene which reduces production of by-products of 5'-guanilic acid such as guanine and guanosine - plasmid-mediated 5'-guanilic-acid-synthase gene transfer and expression in Escherichia coli for 5-guanilic acid production

AUTHOR: PARK Y H; CHANG J Y; LEE J N; OH K H; KIM J H; OH Y S; SIM J I

PATENT ASSIGNEE: CJ CORP 2005

PATENT NUMBER: KR 2005062027 PATENT DATE: 20050623 WPI ACCESSION NO.:

2006-555057 (200657)

PRIORITY APPLIC. NO.: KR 93691 APPLIC. DATE: 20031219

NATIONAL APPLIC. NO.: KR 93691 APPLIC. DATE: 20031219

LANGUAGE: KR

ABSTRACT: DERWENT ABSTRACT: NOVELTY - A recombinant microorganism of Escherichia species having an inactivated ushA gene and a process for accumulating 5'-guanilic acid synthase in a medium by using the microorganism. The microorganism reduces production of by-products of 5'-guanilic acid such as guanine and guanosine, so that the conversion rate into 5-guanilic acid is enhanced. DETAILED DESCRIPTION - The recombinant microorganism Escherichia species GPU1114 (KCCM-10536) having the inactivated ushA gene is provided, where the Escherichia species GPU1114(KCCM-10536) is produced by transforming the Escherichia species GPD1114(KCCM-10543) with a recombinant vector pTushA:loxpcAT containing the gene ushA with an antibiotic marker gene, and selecting the Escherichia species GPU1114(KCCM-10536) having the inactivated ushA gene. The process for accumulating 5'-guanilic acid synthase in the medium comprises culturing the Escherichia species GPU1114(KCCM-10536) in the medium.
? ? ds s25

Set Items Description

S25 4 LOXPKAN

? t s25/7/1

>>>Format 7 is not valid in file 143

25/7/1 (Item 1 from file: 357)

DIALOG(R)File 357:Derwent Biotech Res.

(c) 2006 The Thomson Corp. All rts. reserv.

0401487 DBR Accession Number: 2006-14983 PATENT

Novel Escherichia coli FTR 4014 of Accession Number KCCM 10634 having inactivated LysR gene in chromosome, useful for producing L-threonine - involving LysR gene inactivation and culture medium optimization for L-threonine preparation with uses in food-additives and drug screening

AUTHOR: PARK Y; LEE B; LIM S; KIM B; KIM S

PATENT ASSIGNEE: CJ CORP 2006

PATENT NUMBER: WO 200662327 PATENT DATE: 20060615 WPI ACCESSION NO.:

2006-415194 (200642)

PRIORITY APPLIC. NO.: KR 101664 APPLIC. DATE: 20041206

NATIONAL APPLIC. NO.: WO 2005KR4142 APPLIC. DATE: 20051206

LANGUAGE: English

ABSTRACT: DERWENT ABSTRACT: NOVELTY - An Escherichia coli strain (I) that has an inactivated LysR gene in a chromosome and can produce L-threonine, is new. DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for producing (M1) a L-threonine-producing microorganism, involves preparing an inactivated LysR gene or its DNA fragment, introducing the inactivated LysR gene or its DNA fragment into a microorganism capable of producing L-threonine to cause recombination with a LysR gene present in a chromosome of the microorganism and selecting the microorganism having the inactivated LysR gene. BIOTECHNOLOGY - Preferred Strain: (I) has nutritional requirement for methionine and is resistant to L-threonine analog, L-lysine analog, L-isoleucine analog, and L-methionine analog. Preferred Method: In (M1), the inactivated LysR gene or its the DNA fragment is prepared by inserting a cassette containing an antibiotic marker (loxpKAN) into the LysR gene. USE - (I) is useful for producing L-threonine, which comprises culturing (I) and isolating L-threonine from the culture (claimed). L-threonine is useful as feed, food additive and as raw material for producing drugs. ADVANTAGE - (I) can produce L-threonine with high yield. EXAMPLE - A LysR gene in a chromosome of Escherichia coli was knocked-out through homologous recombination. To this end, a vector including a portion of the LysR gene was prepared and then transformed into E.coli host cell, followed by selecting strains having a knock-out LysR gene. The vector was transformed into L-threonine-producing E.coli strain of Accession Number KCCM 10541 (FTR2533) using electroporation and plated on a solid medium containing chloramphenicol to grow colonies having an inactivated LysR gene. PCR was performed to confirm whether the LysR gene had been specifically recombined in the screened candidate strain. Each of the parent strain KCCM 10541 and the candidate strain was cultured in a 3-ml of liquid medium overnight, and a genomic DNA was isolated from each of the cultures. The candidate strain was named E.coli FTR4014. (21 pages) ?

Untitled

2003

17/8/17 (Item 17 from file: 5)
0014110330 BIOSIS NO.: 200300069049
Effect of different NADH oxidase levels on glucose metabolism by
Lactococcus lactis: Kinetics of intracellular metabolite pools determined
by in vivo nuclear magnetic resonance.
2002

17/8/18 (Item 18 from file: 5)
0014086286 BIOSIS NO.: 200300043635
Expression of an anaplerotic enzyme, pyruvate carboxylase, improves
recombinant protein production in Escherichia coli.
2002

17/8/19 (Item 19 from file: 5)
0014078484 BIOSIS NO.: 200300037203
Gene cloning and characterization of fructose-1,6-bisphosphate aldolase
from the hyperthermophilic archaeon Thermococcus kodakaraensis KOD1.
2002

17/8/20 (Item 20 from file: 5)
0014014702 BIOSIS NO.: 200200608213
Characterization of a pyruvate carboxylase mutant of Azotobacter
vinelandii: Effect on the accumulation of the reserve polymer
polyhydroxybutyrate (PHB)
2002
? ds

Set	Items	Description
S1	4320007	COLI OR ESCHERICHIA OR BACTER?
S2	56133	PCKA OR PPC OR PHOSPHOENOLPYRUVATE OR PEPC OR PYRUVATE (W) CARBOXYLASE OR PEP
S3	3134	TDCB OR THREONINE (W) DEHYDRATASE OR SERINE (W) DEHYDRATASE OR THREONINE (W) DEAMINASE
S4	97	TDCC OR THREONINE (W) SERINE (W) TRANSPORTER
S5	281	THRA
S6	443	THRB
S7	165	THRC
S8	4207740	INACTIVAT? OR DEACTIVAT? OR ATTENUAT? OR MUTAT? OR DELET? - OR SUBSTIT? OR RECOMB?
S9	1	S1 AND S2 AND S3 AND S4 AND S8
S10	3927811	BACTER?
S11	1	S10 AND S2 AND S3 AND S4 AND S8
S12	1638859	THREONINE OR AMINO (W) ACID? OR AMINOACID
S13	11023066	PRODUC? OR MANUFACTURE
S14	2896	S13 AND S10 AND S2
S15	1076	S14 AND S8
S16	874	S15 NOT PY>=2004
S17	650	RD (unique items)

? t s17/free/200-250
>>>"FREE" is not a valid format name in file(s): 306

17/8/200 (Item 200 from file: 5)
0004615610 BIOSIS NO.: 198579034509
ROLE OF III-G-L-C OF THE PHOSPHOENOLPYRUVATE -GLUCOSE PHOSPHOTRANSFERASE
SYSTEM IN INDUCER EXCLUSION IN ESCHERICHIA-COLI
1984

Untitled

17/8/201 (Item 201 from file: 5)
0004359407 BIOSIS NO.: 198478094814
PRODUCTION OF ASPARTIC-ACID AND ENZYMATIC ALTERATION IN PYRUVATE KINASE
MUTANTS OF BREVIBACTERIUM-FLAVUM
1984

17/8/202 (Item 202 from file: 5)
0004230419 BIOSIS NO.: 198477062330
MANNITOL SPECIFIC ENZYME II OF THE BACTERIAL PHOSPHO TRANSFERASE SYSTEM
1. PROPERTIES OF THE PURIFIED PERMEASE
1983

17/8/203 (Item 203 from file: 5)
0004227107 BIOSIS NO.: 198477059018
OVER PRODUCTION OF SALMONELLA-TYPHIMURIUM PEPTIDASE T
1983

17/8/204 (Item 204 from file: 5)
0004219846 BIOSIS NO.: 198477051757
THE ASYMMETRY IN IDIOTYPE ISOTYPE EXPRESSION IN THE RESPONSE TO PHOSPHO
CHOLINE IS DUE TO DIVERGENCE IN THE EXPRESSED REPERTOIRES OF LBY-5-PLUS
AND LBY-5-MINUS B CELLS
1983

17/8/205 (Item 205 from file: 5)
0004179047 BIOSIS NO.: 198477010958
EFFECT OF PTS-I AND PTS-H MUTATIONS ON INITIATION OF TRANSCRIPTION OF THE
ESCHERICHIA-COLI LACTOSE OPERON
1983

17/8/206 (Item 206 from file: 5)
0003926592 BIOSIS NO.: 198376018027
PROPERTIES OF A BACILLUS-SUBTILIS MUTANT ABLE TO SPORULATE CONTINUALLY
DURING GROWTH IN SYNTHETIC MEDIUM
1983

17/8/207 (Item 207 from file: 5)
0003911376 BIOSIS NO.: 198376002811
CLONING AND EXPRESSION OF THE BETA-D PHOSPHO GALACTOSIDE GALACTO HYDROLASE
EC-3.2.1.85 GENE OF LACTOBACILLUS-CASEI IN ESCHERICHIA-COLI K-12
1982

17/8/208 (Item 208 from file: 5)
0003888218 BIOSIS NO.: 198375072161
SALMONELLA-TYPHIMURIUM MUTATIONS AFFECTING UTILIZATION OF L LEUCINE BETA
NAPHTHYLAMIDE
1982

17/8/209 (Item 209 from file: 5)
0003864752 BIOSIS NO.: 198375048695
PYRUVATE IN PRODUCER AND COMMINGLED MANUFACTURING GRADE MILK
1982

Untitled

17/8/210 (Item 210 from file: 5)
0003857514 BIOSIS NO.: 198375041457
SCREENING FOR HIGHLY ACTIVE PLASMID PROMOTERS VIA FUSION TO BETA
GALACTOSIDASE GENE
1982

17/8/211 (Item 211 from file: 5)
0003661836 BIOSIS NO.: 198274078259
PHOSPHOENOL PYRUVATE SUGAR PHOSPHO TRANSFERASE SYSTEM MEDIATED REGULATION
OF CARBOHYDRATE METABOLISM IN SALMONELLA-TYPHIMURIUM
1982

17/8/212 (Item 212 from file: 5)
0003577316 BIOSIS NO.: 198273081243
INTERACTION BETWEEN AMINOSIDINE AND DOXORUBICIN ON ESCHERICHIA-COLI WILD
STRAIN AND RESPIRATORY DEFICIENT MUTANT
1981

17/8/213 (Item 213 from file: 5)
0003564325 BIOSIS NO.: 198273068252
IDENTIFICATION OF A DNA CLONE TO PHOSPHOENOL PYRUVATE CARBOXY KINASE GTP
EC-4.1.1.32 FROM RAT CYTOSOL ALTERATIONS IN PHOSPHOENOL PYRUVATE CARBOXY
KINASE RNA LEVELS DETECTABLE BY HYBRIDIZATION
1981

17/8/214 (Item 214 from file: 5)
0003556739 BIOSIS NO.: 198273060666
TEMPERATURE SENSITIVE MUTATION AFFECTING SYNTHESIS OF PHOSPHOENOL
PYRUVATE CARBOXY KINASE EC-4.1.1.49 IN ESCHERICHIA-COLI
1981

17/8/215 (Item 215 from file: 5)
0003200619 BIOSIS NO.: 198171019578
PHOSPHORYL EXCHANGE REACTION CATALYZED BY ENZYME I OF THE BACTERIAL
PHOSPHOENOL PYRUVATE SUGAR PHOSPHO TRANSFERASE SYSTEM KINETIC
CHARACTERIZATION
1980

17/8/216 (Item 216 from file: 5)
0002991738 BIOSIS NO.: 198070023225
GENETIC AND PHYSIOLOGICAL CHARACTERIZATION OF ESCHERICHIA-COLI MUTANTS
DEFICIENT IN PHOSPHOENOL PYRUVATE CARBOXY KINASE EC-4.1.1.49 ACTIVITY
1980

17/8/217 (Item 217 from file: 5)
0002966891 BIOSIS NO.: 198069080878
REGULATION OF PHOSPHOENOL PYRUVATE CARBOXYLASE EC-4.1.1.31 BY
SYNERGISTIC ACTION OF ASPARTATE AND 2 OXO GLUTARATE
1979

17/8/218 (Item 218 from file: 5)
0002907634 BIOSIS NO.: 198069021621
THE INACTIVATION OF THE ANTIBIOTIC NOVOBIOCIN BY BACILLUS-SUBTILIS
1978

Untitled

17/8/219 (Item 219 from file: 5)
0002758295 BIOSIS NO.: 197968069794
PHOSPHOENOL PYRUVATE DEPENDENT SUCROSE PHOSPHO TRANSFERASE ACTIVITY IN
STREPTOCOCCUS-MUTANS NCTC-10449
1979

17/8/220 (Item 220 from file: 5)
0002729480 BIOSIS NO.: 197968040979
CATABOLITE AND TRANSIENT REPRESSION IN ESCHERICHIA-COLI DO NOT REQUIRE
ENZYME I OF THE PHOSPHO TRANSFERASE SYSTEM
1979

17/8/221 (Item 221 from file: 5)
0002725651 BIOSIS NO.: 197968037150
PHOSPHOENOL PYRUVATE CARBOXYLASE EC-4.1.1.31 OF ESCHERICHIA-COLI THE
ROLE OF LYSYL RESIDUES IN THE CATALYTIC AND REGULATORY FUNCTIONS
1979

17/8/222 (Item 222 from file: 5)
0002632869 BIOSIS NO.: 197967021864
INVOLVEMENT OF THE ESCHERICHIA-COLI PHOSPHOENOL PYRUVATE DEPENDENT PHOSPHO
TRANSFERASE SYSTEM IN REGULATION OF TRANSCRIPTION OF CATABOLIC GENES
1978

17/8/223 (Item 223 from file: 5)
0002628752 BIOSIS NO.: 197967017747
PROBES OF THE STRUCTURE OF PHOSPHOENOL PYRUVATE SYNTHETASE EFFECTS OF A
TRANSITION STATE ANALOG ON ENZYME CONFORMATION
1978

17/8/224 (Item 224 from file: 5)
0002465364 BIOSIS NO.: 197866051848
ESCHERICHIA-COLI K-12 PEL MUTANTS WHICH BLOCK PHAGE LAMBDA DNA INJECTION
COINCIDE WITH PTSM WHICH DETERMINES A COMPONENT OF A SUGAR TRANSPORT
SYSTEM
1978

17/8/225 (Item 225 from file: 5)
0002460173 BIOSIS NO.: 197866046657
ELICITATION OF ENDO TOXEMIC EFFECTS IN C-3H-HEJ MICE WITH GLUCO CORTICOID
ANTAGONIZING FACTOR AND PARTIAL CHARACTERIZATION OF THE FACTOR
1978

17/8/226 (Item 226 from file: 5)
0002434651 BIOSIS NO.: 197866021135
CYCLIC AMP DEPENDENT SYNTHESIS OF FIMBRIAE IN SALMONELLA-TYPHIMURIUM
EFFECTS OF CYA AND PTS MUTATIONS
1978

17/8/227 (Item 227 from file: 5)
0002434617 BIOSIS NO.: 197866021101
A HEAT SENSITIVE LYSIS MUTANT OF BACILLUS-SUBTILIS 168 WITH A LOW ACTIVITY
OF PYRUVATE CARBOXYLASE
1978

Untitled

17/8/228 (Item 228 from file: 5)
0002430163 BIOSIS NO.: 197866016647
INVOLVEMENT OF PHOSPHOENOL PYRUVATE IN THE CATABOLISM OF CARIES CONDUCTIVE
DI SACCHARIDES BY STREPTOCOCCUS-MUTANS LACTOSE TRANSPORT
1978

17/8/229 (Item 229 from file: 5)
0002360612 BIOSIS NO.: 197865021599
AN ABNORMAL RESPONSE OF NUDE MICE TO ENDO TOXIN
1977

17/8/230 (Item 230 from file: 5)
0002340800 BIOSIS NO.: 197865001787
ISOLATION AND CHARACTERIZATION OF SPECIALIZED LAMBDA TRANSDUCING BACTERIO
PHAGE CARRYING THE METBJF METHIONINE GENE CLUSTER
1977

17/8/231 (Item 231 from file: 5)
0002224592 BIOSIS NO.: 197866073081
BIO STEREOCHEMISTRY OF THE PRO CHIRAL METHYLENE GROUP ESPECIALLY OF METHYL
GROUP FORMATION
1977

17/8/232 (Item 232 from file: 5)
0002162268 BIOSIS NO.: 197764010624
DEFECTIVE UTILIZATION OF VARIOUS CARBON SOURCES IN A MUTANT OF
VIBRIO-PARAHAEMOLYTICUS LACKING A COMPONENT OF THE PHOSPHOENOL PYRUVATE
SUGAR PHOSPHO TRANSFERASE SYSTEM
1976

17/8/233 (Item 233 from file: 5)
0002150178 BIOSIS NO.: 197763071034
GLUCOSE EFFECT IN TGL MUTANT OF ESCHERICHIA-COLI STRAIN K-12 DEFECTIVE IN
METHYL-ALPHA-D GLUCOSIDE TRANSPORT
1977

17/8/234 (Item 234 from file: 5)
0002094445 BIOSIS NO.: 197763015301
FUSION OF 2 F-PRIME FACTORS IN ESCHERICHIA-COLI STUDIED BY ELECTRON
MICROSCOPE HETERO DUPLEX ANALYSIS
1976

17/8/235 (Item 1 from file: 10)
DIALOG(R)File 10:(c) format only 2006 Dialog. All rts. reserv.

3811134 22027588 Holding Library: AGL
Elements involved in catabolite repression and substrate induction of the
lactose operon in Lactobacillus casei
1999

DESCRIPTORS: lactobacillus casei; operons; mutants; transcription;
initiation; gene expression; messenger rna; bacterial proteins;
transferases; transcription factors; beta-galactosidase; promoters;
recombinant dna; reporter genes; beta-glucuronidase; genetic regulation;
glucose; lactose; ribose;

Untitled

Identifiers: lac operon; lactose-specific phosphoenolpyruvate
phosphotransferase system; antiterminator protein; lac promoter
Section Headings: Q121 MICROBIOLOGY OF FOOD PROCESSING-DAIRY PRODUCTS

17/8/236 (Item 2 from file: 10)
DIALOG(R)File 10:(c) format only 2006 Dialog. All rts. reserv.

3732744 21974770 Holding Library: AGL
Suppression of the ptsH mutation in Escherichia coli and Salmonella
typhimurium by a DNA fragment from Lactobacillus casei
1998
DESCRIPTORS: lactobacillus casei; regulatory genes; transcription
factors; dna binding proteins; nucleotide sequences; genetic transformation
; gene transfer; inhibition; mutations ; kinases; escherichia coli;
salmonella typhimurium; sugars; fructose; carbohydrate metabolism;
fermentation;
Identifiers: cra protein; cra repressor; molecular sequence data;
genbank/aj006018; phosphoenolpyruvate :carbohydrate phosphotransferase
Section Headings: Q121 MICROBIOLOGY OF FOOD PROCESSING-DAIRY PRODUCTS

17/8/237 (Item 3 from file: 10)
DIALOG(R)File 10:(c) format only 2006 Dialog. All rts. reserv.

3670546 21234398 Holding Library: AGL
Enhanced resistance to two stem borers in an aromatic rice containing a
synthetic cryIA(b) gene
1997
DESCRIPTORS: oryza sativa; genetic transformation; biolistics; gene
transfer; synthetic genes; bacillus thuringiensis; bacterial toxins;
crystal proteins; marker genes; kinases; hygromycin b; drug resistance; in
vitro selection; recombinant dna; promoters; phosphoenolpyruvate
carboxylase; zea mays; inheritance; segregation; gene expression; genetic
resistance; pest resistance; chilo suppressalis; scirpophaga incertulas;
varieties; transgenic plants;
Identifiers: aromatic varieties
Section Headings: F200 PLANT BREEDING; F821 PESTS OF PLANTS-INSECTS

17/8/238 (Item 4 from file: 10)
DIALOG(R)File 10:(c) format only 2006 Dialog. All rts. reserv.

3429556 20447801 Holding Library: AGL
Cloning and nucleotide sequence analysis of the Lactobacillus delbrueckii
ssp. lactis DSM7290 cysteine aminopeptidase gene pepC
1994 Dec15
DESCRIPTORS: lactobacillus delbrueckii; lactic acid bacteria ; cysteine
; aminopeptidases; structural genes; cloning; clones; recombinant dna;
nucleotide sequences; amino acid sequences; comparisons; escherichia coli;
gene expression;
Identifiers: molecular sequence data; genbank/z34896; sequence homology
; sequence alignment
Section Headings: Q121 MICROBIOLOGY OF FOOD PROCESSING-DAIRY PRODUCTS

17/8/239 (Item 1 from file: 24)
DIALOG(R)File 24:(c) 2006 CSA. All rts. reserv.

0002514961 IP ACCESSION NO: 5734182
The Phosphoenolpyruvate Decarboxylase from Bacteroides fragilis
PUBLICATION DATE: 2003

Untitled

DESCRIPTORS: Capsules; Polysaccharides; Overexpression; Nucleotide sequence; aepY gene; phosphoenolpyruvate decarboxylase; Bacteroides fragilis
SUBJ CATG: 02728, Enzymes

17/8/240 (Item 2 from file: 24)
DIALOG(R)File 24:(c) 2006 CSA. All rts. reserv.

0002289583 IP ACCESSION NO: 5301161
Cloning and characterization of the pyruvate carboxylase from Sinorhizobium meliloti Rm1021
PUBLICATION DATE: 2001

DESCRIPTORS: Pyruvate carboxylase ; Gene fusion; Mutation ; Transcription; Carbon sources; Inhibitors; pyc gene; lacZ gene; Aspartic acid; Sinorhizobium.meliloti
IDENTIFIERS: cloning
SUBJ CATG: 02728, Enzymes; 02740, Genetics and evolution

17/8/241 (Item 3 from file: 24)
DIALOG(R)File 24:(c) 2006 CSA. All rts. reserv.

0002286955 IP ACCESSION NO: 5318100
Single and double overexpression of C sub(4)-cycle genes had differential effects on the pattern of endogenous enzymes, attenuation of photorespiration and on contents of UV protectants in transgenic potato and tobacco plants
PUBLICATION DATE: 2001

DESCRIPTORS: Crops; Gene regulation; Respiration; U.V. radiation; Photosynthesis; Phosphoenolpyruvate carboxylase; Pyruvate kinase; Isocitrate dehydrogenase (NADP); Malate dehydrogenase (oxaloacetate-decarboxylating) (NADP super(+)); Phosphoenolpyruvate phosphatase; ppc gene; stppc gene; fpMel gene; Flaveria pringlei; Nicotiana; Sinorhizobium meliloti; Solanum; Corynebacterium glutamicum
IDENTIFIERS: Tobacco
SUBJ CATG: 07354, Dicotyledons (crops)

17/8/242 (Item 4 from file: 24)
DIALOG(R)File 24:(c) 2006 CSA. All rts. reserv.

0002015596 IP ACCESSION NO: 4613617
Mutant phosphoenolpyruvate carboxylase, its gene, and production method of amino acid
PUBLICATION DATE: 1999

DESCRIPTORS: Patents; Phosphoenolpyruvate carboxylase; aspartic acid; arginine; cysteine; Escherichia coli
SUBJ CATG: 32050, Patents; 32310, Enzymes and cofactors

17/8/243 (Item 5 from file: 24)
DIALOG(R)File 24:(c) 2006 CSA. All rts. reserv.

0001944923 IP ACCESSION NO: 4456651
Convergent pathways for utilization of the amino sugars N-acetylglucosamine, N-acetylmannosamine, and N-acetylneuraminic acid by Escherichia coli
PUBLICATION DATE: 1999

Untitled

DESCRIPTORS: Carbon sources; Biodegradation; Phosphoenolpyruvate
-protein phosphotransferase; Gene regulation; N-Acetylglucosamine;
N-Acetylmannosamine; Sialic acid; manXYZ gene; nagBA gene;
Deacetylase; Deaminase; mlc gene; nanAT gene; N-Acetylneuraminate
lyase; yhcK gene; yhcYJH gene; N-Acetylneuraminic acid; Escherichia
coli

SUBJ CATG: 02722, Biodegradation, growth, nutrition and leaching; 07320,
Bacterial genetics; 02730, Carbohydrates

17/8/244 (Item 6 from file: 24)
DIALOG(R)File 24:(c) 2006 CSA. All rts. reserv.

0001782778 IP ACCESSION NO: 4216752
Elucidation of anaplerotic pathways in *Corynebacterium glutamicum* via
super(13)C-NMR spectroscopy and GC-MS
PUBLICATION DATE: 1997

DESCRIPTORS: N.M.R.; mass spectroscopy; gas chromatography; pyruvic acid
; carbon; amino acids; fermentation; *Corynebacterium glutamicum*
IDENTIFIERS: enzymatic activity
SUBJ CATG: 02728, Enzymes; 01006, Enzymes & cofactors

17/8/245 (Item 7 from file: 24)
DIALOG(R)File 24:(c) 2006 CSA. All rts. reserv.

0001493345 IP ACCESSION NO: 3744891
Lactose-specific enzyme II of the phosphoenolpyruvate -dependent
phosphotransferase system of *Staphylococcus aureus*. Purification of the
histidine-tagged transmembrane component IICB super(Lac) and its
hydrophilic IIB domain by metal-affinity chromatography, and functional
characterization
PUBLICATION DATE: 1995

DESCRIPTORS: affinity chromatography; substrate specificity;
phosphorylation; *Staphylococcus aureus*
IDENTIFIERS: enzyme IICBLac
SUBJ CATG: 02728, Enzymes

17/8/246 (Item 8 from file: 24)
DIALOG(R)File 24:(c) 2006 CSA. All rts. reserv.

0000053849 IP ACCESSION NO: 205623
Temperature-Sensitive Mutation Affecting Synthesis of
Phosphoenolpyruvate Carboxykinase in *Escherichia coli* .
PUBLICATION DATE: 1981

DESCRIPTORS: temperature-sensitive mutant; biosynthesis; *Escherichia coli*
IDENTIFIERS: activity; phosphoenolpyruvate carboxykinase (ATP)
SUBJ CATG: 02728, Enzymes; 07320, Bacterial genetics; 02740, Genetics and
evolution

17/8/247 (Item 9 from file: 24)
DIALOG(R)File 24:(c) 2006 CSA. All rts. reserv.

0000040274 IP ACCESSION NO: 165244
Interaction Between Aminosidine and Doxorubicin on *E. coli* wild Strain and
Respiratory Deficient Mutant.
PUBLICATION DATE: 1981

Untitled

DESCRIPTORS: antibacterial activity; Escherichia coli
IDENTIFIERS: mutants; effects on; aminosidine; doxorubicin; drug synergism
SUBJ CATG: 02802, Antibacterial Agents: General; 01066, Antibacterial & bactericidal ; 07320, Bacterial genetics

17/8/248 (Item 1 from file: 34)
DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

12334338 Genuine Article#: 754UN Number of References: 34
Title: Development of a Corynebacterium glutamicum DNA microarray and validation by genome-wide expression profiling during growth with propionate as carbon source (ABSTRACT AVAILABLE)
Publication date: 20031219
Journal Subject Category: BIOTECHNOLOGY & APPLIED MICROBIOLOGY
Descriptors--Author Keywords: Corynebacterium glutamicum ; genome sequence ; DNA microarray ; propionate metabolism ; 2-methylcitrate cycle
Identifiers--Keyword Plus(R): ESCHERICHIA-COLI;
BREVI BACTERIUM-AMMONIAGENES; UPTAKE SYSTEM; FATTY-ACIDS; L-GLUTAMATE; GENE; ACETATE; SEQUENCE; IDENTIFICATION; INACTIVATION

17/8/249 (Item 2 from file: 34)
DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

11752951 Genuine Article#: 691TM Number of References: 44
Title: A single V317A or V317M substitution in Enzyme II of a newly identified beta-glucoside phosphotransferase and utilization system of Corynebacterium glutamicum R extends its specificity towards cellobiose (ABSTRACT AVAILABLE)
Publication date: 20030600
Journal Subject Category: MICROBIOLOGY
Identifiers--Keyword Plus(R): ESCHERICHIA-COLI K-12; BACILLUS-SUBTILIS; NUCLEOTIDE-SEQUENCE; SUBSTRATE-SPECIFICITY; CORYNEFORM BACTERIA ; BGL OPERON; TRANSPORT; GENE; PROTEIN; PHOSPHOENOLPYRUVATE

17/8/250 (Item 3 from file: 34)
DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

11451507 Genuine Article#: 653QR Number of References: 34
Title: Uptake of N,N '-diacetylchitobiose [(GlcNAc)(2)] via the phosphotransferase system is essential for chitinase production by Serratia marcescens 2170 (ABSTRACT AVAILABLE)
Publication date: 20030300
Journal Subject Category: MICROBIOLOGY
Identifiers--Keyword Plus(R): BACTERIUM VIBRIO-FURNISSII; ESCHERICHIA-COLI; MOLECULAR-CLONING; SUGAR-TRANSPORT; BINDING PROTEIN; CRR GENES; SERRATIA-MARCESCENS-2170; PHOSPHOENOLPYRUVATE; RESOLUTION; INSERTION

? ds

Set	Items	Description
S1	4320007	COLI OR ESCHERICHIA OR BACTER?
S2	56133	PCKA OR PPC OR PHOSPHOENOLPYRUVATE OR PEPC OR PYRUVATE (W) CARBOXYLASE OR PEP
S3	3134	TDCB OR THREONINE (W) DEHYDRATASE OR SERINE (W) DEHYDRATASE OR THREONINE (W) DEAMINASE
S4	97	TDCC OR THREONINE (W) SERINE (W) TRANSPORTER
S5	281	THRA
S6	443	THRB
S7	165	THRC

Untitled

S8 4207740 INACTIVAT? OR DEACTIVAT? OR ATTENUAT? OR MUTAT? OR DELET? -
 OR SUBSTIT? OR RECOMB?
 S9 1 S1 AND S2 AND S3 AND S4 AND S8
 S10 3927811 BACTER?
 S11 1 S10 AND S2 AND S3 AND S4 AND S8
 S12 1638859 THREONINE OR AMINO (W) ACID? OR AMINOACID
 S13 11023066 PRODUC? OR MANUFACTURE
 S14 2896 S13 AND S10 AND S2
 S15 1076 S14 AND S8
 S16 874 S15 NOT PY>=2004
 S17 650 RD (unique items)
 ? t s17/2/6,15

17/2/6 (Item 6 from file: 5)
 DIALOG(R)File 5:Biosis Previews(R)
 (c) 2006 The Thomson Corporation. All rts. reserv.

0014565222 BIOSIS NO.: 200300533941
 Manipulation of chromosomal gene expression for metabolic pathway
 engineering of Escherichia coli.
 AUTHOR: Cervin M A (Reprint); Valle F (Reprint)
 AUTHOR ADDRESS: Genencor International, Inc., Palo Alto, CA, USA**USA
 JOURNAL: Abstracts of the General Meeting of the American Society for
 Microbiology 103 pK-104 2003 2003
 MEDIUM: cd-rom
 CONFERENCE/MEETING: 103rd American Society for Microbiology General Meeting
 Washington, DC, USA May 18-22, 2003; 20030518
 SPONSOR: American Society for Microbiology
 ISSN: 1060-2011 (ISSN print)
 DOCUMENT TYPE: Meeting; Meeting Abstract
 RECORD TYPE: Abstract
 LANGUAGE: English
 REGISTRY NUMBERS: 9001-36-9Q: glucokinase; 9001-51-8Q: glucokinase;
 173585-07-4Q: glucokinase; 9001-36-9: glucokinase; 50-99-7Q: glucose;
 58367-01-4Q: glucose; 56-73-5: glucose-6-phosphate; 56-81-5: glycerol
 ENZYME COMMISSION NUMBER: EC 2.7.1.2: glucokinase
 DESCRIPTORS:
 MAJOR CONCEPTS: Bioprocess Engineering; Enzymology--Biochemistry and
 Molecular Biophysics; Metabolism; Methods and Techniques; Molecular
 Genetics--Biochemistry and Molecular Biophysics
 BIOSYSTEMATIC NAMES: Enterobacteriaceae--Facultatively Anaerobic
 Gram-Negative Rods, Eubacteria, Bacteria, Microorganisms
 ORGANISMS: Escherichia coli (Enterobacteriaceae)
 COMMON TAXONOMIC TERMS: Bacteria; Eubacteria; Microorganisms
 CHEMICALS & BIOCHEMICALS: PEPT-PTSglc system; galactose permease;
 glucokinase; glucose--phosphorylation, transport; glucose-6-phosphate;
 glycerol-- production; recombinase
 GENE NAME: Escherichia coli Dar1 gene (Enterobacteriaceae); Escherichia
 coli GPP2 gene (Enterobacteriaceae); Escherichia coli galP gene
 (Enterobacteriaceae); Escherichia coli glk gene (Enterobacteriaceae);
 Escherichia coli loxP gene (Enterobacteriaceae)
 METHODS & EQUIPMENT: PCR amplification {polymerase chain reaction
 amplification}--genetic techniques, laboratory techniques; chromosomal
 gene expression manipulation--genetic techniques, laboratory
 techniques; electroporation--genetic techniques, laboratory techniques
 ; metabolic pathway engineering--applied and field techniques, genetic
 techniques, laboratory techniques; promoter replacement system--
 genetic techniques, laboratory techniques
 CONCEPT CODES:
 00520 General biology - Symposia, transactions and proceedings
 03502 Genetics - General
 10060 Biochemistry studies - General
 10062 Biochemistry studies - Nucleic acids, purines and pyrimidines

Untitled

10068 Biochemistry studies - Carbohydrates
10802 Enzymes - General and comparative studies: coenzymes
13002 Metabolism - General metabolism and metabolic pathways
31000 Physiology and biochemistry of bacteria
31500 Genetics of bacteria and viruses
39008 Food microbiology - General and miscellaneous
BIOSYSTEMATIC CODES:
06702 Enterobacteriaceae

17/2/15 (Item 15 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2006 The Thomson Corporation. All rts. reserv.

0014192678 BIOSIS NO.: 200300151397
Construction and enzymatic characterization of E. coli gltA and PPC mutants.
AUTHOR: Vandedrinck Sofie (Reprint); De Maeseneire Sofie (Reprint); Deschamps Geert; Sablon Erwin; Vandamme Erick J (Reprint)
AUTHOR ADDRESS: Laboratory of Industrial Microbiology and Biocatalysis, Department of Biochemical and Microbial Technology, Ghent University, Coupure Links 653, B-9000, Gent, Belgium**Belgium
JOURNAL: Mededelingen Faculteit Landbouwkundige en Toegepaste Biologische Wetenschappen Universiteit Gent 67 (4): p261-264 2002 2002
MEDIUM: print
ISSN: 1373-7503 _(ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Citation
LANGUAGE: English
REGISTRY NUMBERS: 9027-96-7: citrate synthase; 9013-08-5Q: phosphoenolpyruvate carboxylase; 9013-12-1Q: phosphoenolpyruvate carboxylase; 9067-77-0Q: phosphoenolpyruvate carboxylase; 9073-94-3Q: phosphoenolpyruvate carboxylase; 9067-77-0: phosphoenolpyruvate carboxylase
ENZYME COMMISSION NUMBER: EC 4.1.3.7: citrate synthase; EC 4.1.1.31: phosphoenolpyruvate carboxylase
DESCRIPTORS:
MAJOR CONCEPTS: Bioprocess Engineering; Enzymology--Biochemistry and Molecular Biophysics; Metabolism; Molecular Genetics--Biochemistry and Molecular Biophysics
BIOSYSTEMATIC NAMES: Bacteria --Microorganisms; Enterobacteriaceae--Facultatively Anaerobic Gram-Negative Rods, Eubacteria, Bacteria, Microorganisms
ORGANISMS: bacteria (Bacteria); Escherichia coli (Enterobacteriaceae) --expression system
COMMON TAXONOMIC TERMS: Bacteria ; Eubacteria; Microorganisms
CHEMICALS & BIOCHEMICALS: enzymes--analysis, activities, functions; recombinant proteins-- production ; citrate synthase; phosphoenolpyruvate carboxylase; metabolites-- production , characterization
METHODS & EQUIPMENT: enzyme activity assays--bioassay techniques, laboratory techniques; western blotting--genetic techniques, laboratory techniques
MISCELLANEOUS TERMS: gene mutations --characterization, construction, gltA, ppc ; industrial microbiology--applications; tricarboxylic acid cycle; bacterial genetics; glycolysis
CONCEPT CODES:
03502 Genetics - General
10064 Biochemistry studies - Proteins, peptides and amino acids
10802 Enzymes - General and comparative studies: coenzymes
13002 Metabolism - General metabolism and metabolic pathways
31000 Physiology and biochemistry of bacteria
31500 Genetics of bacteria and viruses

Untitled

39008 Food microbiology - General and miscellaneous

BIOSYSTEMATIC CODES:

05000 Bacteria

06702 Enterobacteriaceae

? ds

Set	Items	Description
S1	4320007	COLI OR ESCHERICHIA OR BACTER?
S2	56133	PCKA OR PPC OR PHOSPHOENOLPYRUVATE OR PEPC OR PYRUVATE (W)
		CARBOXYLASE OR PEP
S3	3134	TDCB OR THREONINE (W) DEHYDRATASE OR SERINE (W) DEHYDRATASE
		OR THREONINE (W) DEAMINASE
S4	97	TDCC OR THREONINE (W) SERINE (W) TRANSPORTER
S5	281	THRA
S6	443	THRB
S7	165	THRC
S8	4207740	INACTIVAT? OR DEACTIVAT? OR ATTENUAT? OR MUTAT? OR DELET? -
		OR SUBSTIT? OR RECOMB?
S9	1	S1 AND S2 AND S3 AND S4 AND S8
S10	3927811	BACTER?
S11	1	S10 AND S2 AND S3 AND S4 AND S8
S12	1638859	THREONINE OR AMINO (W) ACID? OR AMINOACID
S13	11023066	PRODUC? OR MANUFACTURE
S14	2896	S13 AND S10 AND S2
S15	1076	S14 AND S8
S16	874	S15 NOT PY>=2004
S17	650	RD (unique items)

? s threonine (w) (produc? or manufacture) or (amino (w) acid) (w) (produc? or manufacture)

Processing

Processed 10 of 20 files ...

Processing

Completed processing all files

	92779	THREONINE
	10925007	PRODUC?
	193066	MANUFACTURE
	587	THREONINE(W)(PRODUC? OR MANUFACTURE)
	1881261	AMINO
	5172896	ACID
	10925007	PRODUC?
	193066	MANUFACTURE
	2794	AMINO(W)ACID(W)(PRODUC? OR MANUFACTURE)
S18	3319	THREONINE (W) (PRODUC? OR MANUFACTURE) OR (AMINO (W) ACID) (W) (PRODUC? OR MANUFACTURE)

? ds

Set	Items	Description
S1	4320007	COLI OR ESCHERICHIA OR BACTER?
S2	56133	PCKA OR PPC OR PHOSPHOENOLPYRUVATE OR PEPC OR PYRUVATE (W)
		CARBOXYLASE OR PEP
S3	3134	TDCB OR THREONINE (W) DEHYDRATASE OR SERINE (W) DEHYDRATASE
		OR THREONINE (W) DEAMINASE
S4	97	TDCC OR THREONINE (W) SERINE (W) TRANSPORTER
S5	281	THRA
S6	443	THRB
S7	165	THRC
S8	4207740	INACTIVAT? OR DEACTIVAT? OR ATTENUAT? OR MUTAT? OR DELET? -
		OR SUBSTIT? OR RECOMB?
S9	1	S1 AND S2 AND S3 AND S4 AND S8
S10	3927811	BACTER?
S11	1	S10 AND S2 AND S3 AND S4 AND S8
S12	1638859	THREONINE OR AMINO (W) ACID? OR AMINOACID
S13	11023066	PRODUC? OR MANUFACTURE

Untitled

S14 2896 S13 AND S10 AND S2
 S15 1076 S14 AND S8
 S16 874 S15 NOT PY>=2004
 S17 650 RD (unique items)
 S18 3319 THREONINE (W) (PRODUC? OR MANUFACTURE) OR (AMINO (W) ACID)
 (W) (PRODUC? OR MANUFACTURE)

? s s18 and s8 and s10 and s2

3319 S18
 4207740 S8
 3927811 S10
 56133 S2

S19 101 S18 AND S8 AND S10 AND S2

? rd

>>>Duplicate detection is not supported for File 235.

>>>Duplicate detection is not supported for File 306.

>>>Records from unsupported files will be retained in the RD set.

S20 95 RD (unique items)

? t s20/free/all

>>>"FREE" is not a valid format name in file(s): 306

20/8/1 (Item 1 from file: 5)
 0015906927 BIOSIS NO.: 200600252322
 Fermentation process for the preparation of L-amino acids using strains of
 the family Enterobacteriaceae
 2005

20/8/2 (Item 2 from file: 5)
 0014438693 BIOSIS NO.: 200300397123
 Role of the Bacillus methanolicus citrate synthase II gene, citY, in
 regulating the secretion of glutamate in L-lysine-secreting mutants.
 2003

20/8/3 (Item 3 from file: 5)
 0013567003 BIOSIS NO.: 200200160514
 Characterization of the phosphoenolpyruvate carboxykinase gene from
 Corynebacterium glutamicum and significance of the enzyme for growth and
 amino acid production
 2001

20/8/4 (Item 4 from file: 5)
 0013554416 BIOSIS NO.: 200200147927
 Pyruvate carboxylase is a major bottleneck for glutamate and lysine
 production by Corynebacterium glutamicum
 2001

20/8/5 (Item 5 from file: 5)
 0011461932 BIOSIS NO.: 199800256179
 Pyruvate carboxylase from Corynebacterium glutamicum: Characterization,
 expression and inactivation of the pyc gene
 1998

20/8/6 (Item 6 from file: 5)
 0009381804 BIOSIS NO.: 199497403089
 Characterization of the isocitrate lyase gene from Corynebacterium
 glutamicum and biochemical analysis of the enzyme

1994

20/8/7 (Item 1 from file: 34)
DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

15296672 Genuine Article#: 057UO Number of References: 149
Title: Emerging *Corynebacterium glutamicum* systems biology (ABSTRACT AVAILABLE)
Publication date: 20060625
Journal Subject Category: BIOTECHNOLOGY & APPLIED MICROBIOLOGY
Descriptors--Author Keywords: systems biology ; white biotechnology ; *Corynebacterium glutamicum* ; amino acid production ; strain development ; genomics ; transcriptomics ; DNA microarray ; proteomics ; metabolic flux analysis ; metabolite profiling ; metabolomics ; mathematical modeling
Identifiers--Keyword Plus(R): METABOLIC FLUX ANALYSIS; COMPLETE GENOME SEQUENCE; SENSOR REACTOR APPROACH; L-LYSINE PRODUCTION; AMINO - ACID PRODUCTION ; IN-VIVO KINETICS; MASS-SPECTROMETRY; ESCHERICHIA-COLI; SACCHAROMYCES-CEREVISIAE; PYRUVATE - CARBOXYLASE

20/8/8 (Item 2 from file: 34)
DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

12334338 Genuine Article#: 754UN Number of References: 34
Title: Development of a *Corynebacterium glutamicum* DNA microarray and validation by genome-wide expression profiling during growth with propionate as carbon source (ABSTRACT AVAILABLE)
Publication date: 20031219
Journal Subject Category: BIOTECHNOLOGY & APPLIED MICROBIOLOGY
Descriptors--Author Keywords: *Corynebacterium glutamicum* ; genome sequence ; DNA microarray ; propionate metabolism ; 2-methylcitrate cycle
Identifiers--Keyword Plus(R): ESCHERICHIA-COLI; BREVIBACTERIUM-AMMONIAGENES; UPTAKE SYSTEM; FATTY-ACIDS; L-GLUTAMATE; GENE; ACETATE; SEQUENCE; IDENTIFICATION; INACTIVATION

20/8/9 (Item 3 from file: 34)
DIALOG(R)File 34:(c) 2006 The Thomson Corp. All rts. reserv.

03924991 Genuine Article#: QR893 Number of References: 187
Title: RECENT ADVANCES IN THE PHYSIOLOGY AND GENETICS OF AMINO ACID - PRODUCING BACTERIA (Abstract Available)
Journal Subject Category: BIOTECHNOLOGY & APPLIED MICROBIOLOGY
Descriptors--Author Keywords: CORYNEBACTERIUM GLUTAMICUM ; LYSINE ; GLUTAMATE ; PYRUVATE KINASE ; ASPARTOKINASE ; METABOLIC ENGINEERING
Identifiers--Keywords Plus: BREVIBACTERIUM-LACTOFERMENTUM PROTOPLASTS; INDUCIBLE PHAGE PARTICLE; LYSINE-PRODUCING MUTANTS; TRANSFER-RNA-SYNTHETASE; L- THREONINE PRODUCTION ; EFFLUX CARRIER SYSTEM; CORYNEBACTERIUM-GLUTAMICUM; ESCHERICHIA-COLI; NUCLEOTIDE-SEQUENCE; PHOSPHOENOLPYRUVATE CARBOXYLASE

20/8/10 (Item 1 from file: 357)
0392816 DBR Accession No.: 2006-06312
Microorganisms for production of sulfur-containing compounds, particularly methionine or cysteine, have reduced activity of a specific protein that controls sulfur-compound biosynthesis - vector-mediated gene transfer and expression in *Chloroflexus auranticus*, but most preferably *Corynebacterium glutamicum* for recombinant amino acid production
2006

Untitled

20/8/11 (Item 2 from file: 357)

0391596 DBR Accession No.: 2006-05092

New promoter, P180, from *Corynebacterium*, useful for regulating expression of genes in recombinant cells, particularly for fermentative production of amino acids - plasmid-mediated gene transfer and expression in *Corynebacterium glutamicum* for use in lysine, methionine and threonine production 2006

20/8/12 (Item 3 from file: 357)

0377630 DBR Accession No.: 2005-23336

New microorganism belonging to the Enterobacteriaceae family, preferably *Escherichia coli*, and having an inactivated *galR* gene, useful for producing high yields of L-threonine - recombinant mutant *Escherichia coli* construction for strain improvement and high yield L- threonine production 2005

20/8/13 (Item 4 from file: 357)

0377536 DBR Accession No.: 2005-23242

New microorganism (i.e. *Escherichia coli* FTR7624) having an inactivated *tyrR* gene, useful for producing L-threonine which may be utilized as a feed or food additive, or as a pharmaceutical or raw material for synthesizing drugs - method of recombinant production of L-threonine from an *Escherichia coli* having a *tyrR* gene inactivation useful for the production of a feed-additive 2005

20/8/14 (Item 5 from file: 357)

0377516 DBR Accession No.: 2005-23222

Preparing L-amino acids (i.e. L-threonine) useful in human medicine or in pharmaceutical or food industry, comprises fermenting strains of the family Enterobacteriaceae in which the open reading frame denoted by *yibD* is enhanced - for use in pharmaceutical and food industries 2005

20/8/15 (Item 6 from file: 357)

0377293 DBR Accession No.: 2005-22999

New recombinant microorganism of the Enterobacteriaceae family, containing enhanced or over-expressed *yaaU* open reading frame that encodes polypeptide, useful for production of L-amino acids e.g. L-isoleucine and L-valine - for use in L-amino acid preparation 2005

20/8/16 (Item 7 from file: 357)

0376635 DBR Accession No.: 2005-22341

Preparing L-amino acids, in particular L-threonine, for use in human medicine and in pharmaceuticals and foodstuffs industries, comprises fermenting strains of the Enterobacteriaceae family - L- amino acid production via recombinant bacterium culture for use in food and pharmaceutical industry 2005

20/8/17 (Item 8 from file: 357)

0376634 DBR Accession No.: 2005-22340

Preparing L-amino acids, in particular L-threonine, for use in human medicine and in pharmaceuticals and foodstuffs industries, comprises fermenting strains of the Enterobacteriaceae family - L- amino acid production via bacterium culture for use in food and pharmaceutical industry 2005

Untitled

- 20/8/18 (Item 9 from file: 357)
0360560 DBR Accession No.: 2005-06264
Stereoselective synthesis of beta-amino acid such as D-beta- or L-beta-phenylalanine, by contacting amino donor and amino acceptor in presence of beta-amino acid transaminase to form beta-amino acid enantiomer, from amino acceptor - stereospecific beta- amino acid production via bacterium purified enzyme 2005
- 20/8/19 (Item 10 from file: 357)
0353188 DBR Accession No.: 2004-25480
Production of L-amino acids e.g. L-threonine by fermentation involves culturing recombinant family Enterobacteriaceae microorganisms producing L-amino acid and having overexpressed yfiD open reading frame and/or pf1B gene; and isolating - amino acid production via plasmid expression in host cell culture 2004
- 20/8/20 (Item 11 from file: 357)
0353187 DBR Accession No.: 2004-25479
New L- amino acid producing bacterium belonging to the genus Escherichia useful for the production of L-amino acids e.g. L-tryptophan, L-phenylalanine is modified to have enhanced activity of phosphoenolpyruvate carboxykinase - L- amino acid production via plasmid expression in host cell culture 2004
- 20/8/21 (Item 12 from file: 357)
0351513 DBR Accession No.: 2004-23805
New Escherichia coli strain used for producing L-threonine comprises both tdcBC and pckA genes that are inactivated - L- amino acid production via plasmid expression in host cell 2004
- 20/8/22 (Item 13 from file: 357)
0350023 DBR Accession No.: 2004-22315
Obtaining bacterium with optimum expression level of target gene encoding protein influencing carbon fluxes in bacterium , by introducing DNA with regulator for target expression into bacterium , selecting bacterium with desired phenotype - plasmid-mediated citrate-synthase, glutamate-dehydrogenase gene transfer and expression in Escherichia coli for recombinant glutamine, proline, leucine production 2004
- 20/8/23 (Item 14 from file: 357)
0348857 DBR Accession No.: 2004-21149
Production of L-amino acids, especially L-threonine, comprises culturing a microorganism of the family Enterobacteriaceae in which the yjgF open reading frame is attenuated - vectpr-mediated gene transfer and expression in Enterobactetr sp. for recimbinnat threonine production for use in pharmaceutical and food industry 2004
- 20/8/24 (Item 15 from file: 357)
0342048 DBR Accession No.: 2004-14340
New L- threonine - producing microorganism in which the fadR gene has been knocked out, useful for producing high yields of L-threonine, as a feed and food additive, or as a pharmaceutical raw material for synthesizing some drugs - bacterium gene knockout for strain improvement and L-amino acid preparation 2004

Untitled

0341915 DBR Accession No.: 2004-14207

Serial C-13-based flux analysis of an L-phenylalanine-producing E-coli strain using the sensor reactor - L- amino acid production via plasmid expression in host cell culture for use in artificial sweetener 2004

20/8/26 (Item 17 from file: 357)

0340324 DBR Accession No.: 2004-12616

Fermentative production of sulfur-containing fine chemicals, useful e.g. as feed additive, by culturing bacteria containing heterologous sequence for O-acetylhomoserine sulphydrolase - L- amino acid production via bacterium fermentation for use in food industry 2004

20/8/27 (Item 18 from file: 357)

0337505 DBR Accession No.: 2004-09797

Preparation of L-amino acids, particularly threonine, useful as animal feed additives, by culturing Enterobacteriaceae that overexpress the bacterioferritin gene - vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation 2004

20/8/28 (Item 19 from file: 357)

0337504 DBR Accession No.: 2004-09796

Preparation of L-amino acids, particularly threonine, useful especially as fodder additives, from a culture of Enterobacteriaceae that overexpresses the uridine phosphorylase gene - vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation 2004

20/8/29 (Item 20 from file: 357)

0335617 DBR Accession No.: 2004-07909

New isolated polynucleotide encoding L-amino acids from coryneform bacteria, useful in human medicine and the pharmaceuticals industry, and particularly in animal nutrition - vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation 2003

20/8/30 (Item 21 from file: 357)

0334728 DBR Accession No.: 2004-07020

Preparing of L-amino acids, useful in human medicine, pharmaceutical industry, foodstuff industry and in animal nutrition, by fermenting coryneform bacteria containing attenuated malate enzyme - L- amino acid production via bacterium culture for use in food and pharmaceutical industry 2003

20/8/31 (Item 22 from file: 357)

0327502 DBR Accession No.: 2003-28643

Novel isolated coryneform bacteria citE gene polynucleotide which encodes polypeptide preferably exhibiting citrate lyase E activity, useful for production of L-amino acids - recombinant enzyme protein production via plasmid expression in host cell useful for L- amino acid production 2003

20/8/32 (Item 23 from file: 357)

0325268 DBR Accession No.: 2003-26409

Preparation of amino acids, particularly threonine, useful e.g. in animal nutrition, by growing Enterobacteriaceae having increased activity of

Untitled

aldA, B or H, or betB genes - vector-mediated gene transfer and expression in host cell for strain improvement and amino acid preparation 2003

20/8/33 (Item 24 from file: 357)

0325267 DBR Accession No.: 2003-26408

Preparation of amino acids, particularly threonine, useful e.g. in animal nutrition, by growing Enterobacteriaceae having increased activity of the mglB gene - vector-mediated gene transfer and expression in host cell for strain improvement and amino acid preparation 2003

20/8/34 (Item 25 from file: 357)

0325190 DBR Accession No.: 2003-26331

New recombinant plasmid having a deactivated threonine dehydratase (tdc) gene, useful for transforming a microorganism for increased production of L-threonine for medical and pharmaceutical use - vector-mediated mutant threonine-dehydratase gene transfer and expression in host cell for strain improvement and L-amino acid preparation 2003

20/8/35 (Item 26 from file: 357)

0324780 DBR Accession No.: 2003-25921

Preparation of amino acids, particularly threonine useful e.g. in animal nutrition, by growing Enterobacteriaceae having increased activity of e.g. lpd, aceE or aceF genes - involving Enterobacter sp. culture medium optimization and fermentation 2003

20/8/36 (Item 27 from file: 357)

0324229 DBR Accession No.: 2003-25369

Preparing L-lysine or L-threonine by the fermentation of coryneform bacteria comprises fragmenting L-lysine or L-threonine producing bacteria where the endogenous gene that codes for transketolase (tkt) is over-expressed - vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation 2003

20/8/37 (Item 28 from file: 357)

0321611 DBR Accession No.: 2003-22751

New pyruvate carboxylase from Corynebacterium glutamicum, useful as an anaplerotic enzyme replenishing oxaloacetate consumed for biosynthesis during growth, or for lysine or glutamic acid production in industrial fermentations - recombinant enzyme production via plasmid expression in host cell for use in amino acid production 2003

20/8/38 (Item 29 from file: 357)

0317673 DBR Accession No.: 2003-18813

L-threonine producing microorganism and method for producing l-threonine using the same - feed-additive and food-additive or medicine production using recombinant Escherichia coli expressing phosphoenolpyruvate - carboxylase 2002

20/8/39 (Item 30 from file: 357)

0317672 DBR Accession No.: 2003-18812

L-threonine producing microorganism and method for producing l-threonine using the same microorganism - feed-additive, food-additive and medicine production using recombinant Escherichia coli expressing phosphoenolpyruvate - carboxylase gene 2002

Untitled

20/8/40 (Item 31 from file: 357)
0315825 DBR Accession No.: 2003-16965

Production of L-amino acids from cultures of microbes with reduced or absent malate quinone reductase activity, to give improved yields - plasmid-mediated mutant homoserine-dehydrogenase, aspartate-kinase or pyruvate - decarboxylase gene transfer and expression in *Brevibacterium* sp., *Microbacterium* sp., *Escherichia* sp. or *Corynebacterium glutamicum* for recombinant lysine production 2003

20/8/41 (Item 32 from file: 357)
0311458 DBR Accession No.: 2003-12598

Fermentative production of L-amino acids, useful e.g. in animal nutrition, by growing Enterobacteriaceae in which at least one specific gene has been suppressed - L-amino acid production via bacterium fermentation useful for food 2003

20/8/42 (Item 33 from file: 357)
0311457 DBR Accession No.: 2003-12597

Fermentative production of L-amino acids useful in e.g. animal nutrition, comprising growing Enterobacteriaceae in which activity of at least one specific gene is increased - L-threonine production by fermentation of recombinant strain 2003

20/8/43 (Item 34 from file: 357)
0309901 DBR Accession No.: 2003-11686

Preparing L-amino acids, in particular L-threonine, by fermenting microorganisms of Enterobacteriaceae family in which genes such as *sucC* and *sucD*, are enhanced, in particular over-expressed and isolating L-amino acid - involving vector-mediated *phoE* gene transfer and expression in host cell and fermentation for use in foodstuff and pharmaceutical industry 2003

20/8/44 (Item 35 from file: 357)
0309900 DBR Accession No.: 2003-11685

Preparing L-amino acids, especially L-threonine, by fermenting microorganisms of Enterobacteriaceae family in which *rseA*, *rseC* genes are enhanced, preferably over-expressed and isolating amino acid from culture medium - involving vector-mediated *phoE* gene transfer and expression in host cell and fermentation for use in foodstuff and pharmaceutical industry 2003

20/8/45 (Item 36 from file: 357)
0309898 DBR Accession No.: 2003-11683

Preparing L-amino acids, in particular L-threonine, by fermenting microorganisms of Enterobacteriaceae family in which *phoE* gene coding for protein E of outer cell membrane is enhanced and isolating L-amino acid - vector-mediated *phoE* gene transfer and expression in host cell for use in L-amino-acid preparation 2003

20/8/46 (Item 37 from file: 357)
0309716 DBR Accession No.: 2003-11501

Preparing L-amino acids, in particular L-threonine, by fermenting microorganisms of Enterobacteriaceae family in which genes such as *sucA* and *sucB*, are enhanced, in particular over-expressed and isolating L-amino acid - vector-mediated gene transfer and expression in host

Untitled
cell for strain improvement and L-amino acid preparation 2003

20/8/47 (Item 38 from file: 357)
0309715 DBR Accession No.: 2003-11500
Preparing L-amino acids, e.g. L-threonine, by fermenting microorganisms of Enterobacteriaceae family in which talB gene is enhanced, preferably over-expressed, and isolating L-amino acid from the culture medium - vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation 2003

20/8/48 (Item 39 from file: 357)
0309714 DBR Accession No.: 2003-11499
Preparing L-amino acids, e.g. L-threonine, by fermenting microorganisms of Enterobacteriaceae family in which phoB and/or phoR genes are enhanced, preferably over-expressed, isolating L-amino acid from culture medium - vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation 2003

20/8/49 (Item 40 from file: 357)
0309711 DBR Accession No.: 2003-11496
Preparing L-amino acids, in particular L-threonine, by fermenting microorganisms of Enterobacteriaceae family in which superoxide dismutase gene, is enhanced, in particular over-expressed, and isolating L-amino acid - vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation 2003

20/8/50 (Item 41 from file: 357)
0309710 DBR Accession No.: 2003-11495
Preparing L-amino acids, e.g. L-threonine, by fermenting microorganisms of Enterobacteriaceae family in which pfkB gene is enhanced, preferably over-expressed, and isolating L-amino acid from the culture medium - vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation 2003

20/8/51 (Item 42 from file: 357)
0309600 DBR Accession No.: 2003-11385
Preparing L-amino acids, e.g. L-threonine by fermenting microorganisms of Enterobacteriaceae family in which at least the malE gene is enhanced, in particular overexpressed, and isolating the desired amino acid - L-amino acid production via bacterium fermentation 2003

20/8/52 (Item 43 from file: 357)
0309599 DBR Accession No.: 2003-11384
Preparing L-amino acids, in particular L-threonine, by fermenting microorganisms of Enterobacteriaceae family in which the aspartate ammonium lyase gene, is attenuated or eliminated and isolating the L-amino acid - L-amino acid production via bacterium fermentation 2003

20/8/53 (Item 44 from file: 357)
0309598 DBR Accession No.: 2003-11383
Preparing L-amino acids, in particular L-threonine, by fermenting microorganisms of Enterobacteriaceae family in which ugpB gene is attenuated, in particular eliminated and isolating L-amino acid from culture medium - L-amino acid production via bacterium fermentation useful for pharmaceutical and food industry 2003

Untitled

20/8/54 (Item 45 from file: 357)
0309597 DBR Accession No.: 2003-11382
Preparing L-amino acids, e.g., L-threonine, by fermenting microorganisms of Enterobacteriaceae family in which genes e.g. malE, phoA, phoB, phoR are attenuated, in particular eliminated, and isolating L-amino acid - L- amino acid production via bacterium fermentation useful for pharmaceutic 2003

20/8/55 (Item 46 from file: 357)
0305251 DBR Accession No.: 2003-07036
Producing target substance e.g. L-amino acid, by culturing a mutant or recombinant microorganism in a culture medium to produce and accumulate target substance, and collecting target substance from the culture - L- amino acid production by recombinant Escherichia coli culture 2002

20/8/56 (Item 47 from file: 357)
0305249 DBR Accession No.: 2003-07034
Fermentative production of L-amino acid, useful e.g. as animal feed additive, by growing Enterobacteriaceae in which activity of four specified genes has been reduced - L- amino acid production by bacterium fermentation useful for pharmaceutical and food industry and animal nutrition 2002

20/8/57 (Item 48 from file: 357)
0302254 DBR Accession No.: 2003-04039
Producing L-threonine using a microorganism, in which one or more copies of phosphoenolpyruvate carboxylase gene and threonine operon are additionally integrated into chromosomal DNA of the microorganism - amino acid production from recombinant Escherichia coli fermentation 2002

20/8/58 (Item 49 from file: 357)
0301393 DBR Accession No.: 2003-03178
New nucleic acid encoding citrate-lyase E from coryneform bacteria, useful, when suppressed, for increasing fermentative production of amino acids - vector expression in host cell for production of recombinant protein for amino acid production 2002

20/8/59 (Item 50 from file: 357)
0300627 DBR Accession No.: 2003-02411
Fermentative production of L-amino acids, especially lysine or valine, by fermenting Coryneform bacteria in which the nadA and/or nadC gene is weakened - vector expression in bacterium host cell, fermentation and mutation for amino acid production and food 2002

20/8/60 (Item 51 from file: 357)
0298279 DBR Accession No.: 2003-00063
Novel polynucleotides from Corynebacterium glutamicum useful for inducing and regulating expression of genes, including those that are involved in amino acid biosynthesis, in bacterial cells - recombinant protein production via plasmid expression in host cell for enzyme transcription regulation and amino acid production 2002

Untitled

- 20/8/61 (Item 52 from file: 357)
0294371 DBR Accession No.: 2002-16218
Fermentative production of amino acids in Enterobacteriaceae, useful e.g. in animal nutrition, improved by suppression of specific genes - L-threonine production by Enterobacteriaceae or Escherichia coli culture, following strain improvement 2002
- 20/8/62 (Item 53 from file: 357)
0293929 DBR Accession No.: 2002-15776
Novel polynucleotide from Coryneform bacteria coding for PPGK gene, useful as hybridization probe for detecting DNA to isolate nucleic acids, polynucleotides or genes coding for transcription activator ppgk - recombinant Corynebacterium glutamicum production useful for L-amino acid production, especially L-lysine production 2002
- 20/8/63 (Item 54 from file: 357)
0293921 DBR Accession No.: 2002-15768
New polynucleotide from coryneform bacteria, useful when overexpressed for increasing fermentative amino acid production, encodes sigma factor D - vector-mediated gene transfer and expression in host cell for strain improvement and L-lysine preparation 2002
- 20/8/64 (Item 55 from file: 357)
0293920 DBR Accession No.: 2002-15767
New polynucleotide from coryneform bacteria, useful when weakened, for increasing fermentative amino acid production, encodes lipoic acid synthetase - vector-mediated gene transfer and expression in host cell for strain improvement and L-lysine preparation 2002
- 20/8/65 (Item 56 from file: 357)
0293919 DBR Accession No.: 2002-15766
New polynucleotide from coryneform bacteria, useful, when weakened, for increasing fermentative amino acid production, encodes lipoprotein ligase B - vector-mediated gene transfer and expression in host cell for strain improvement and L-lysine preparation 2002
- 20/8/66 (Item 57 from file: 357)
0291939 DBR Accession No.: 2002-13786
New bacterium belonging to genus Escherichia, useful for producing L-threonine or L-isoleucine, in which intracellular phosphoenolpyruvate carboxylase activity and transhydrogenase activity are enhanced - amino acid production and purification from novel Escherichia coli with enhanced enzyme activity 2002
- 20/8/67 (Item 58 from file: 357)
0291527 DBR Accession No.: 2002-13374
New isolated deformylase polypeptide encoding polynucleotide from coryneform bacteria which when present in attenuated form in L-lysine producing bacteria, results in increased fermentative production of L-lysine - recombinant enzyme gene, vector expression in host cell, fermentation for L-amino acid production 2002
- 20/8/68 (Item 59 from file: 357)
0291492 DBR Accession No.: 2002-13339
Novel polynucleotide from Coryneform bacteria coding for thyA gene, useful as hybridization probe for detecting DNA to isolate nucleic

Untitled

acids, polynucleotides or genes coding for thymidilate synthase -
recombinant protein gene, vector expression in host cell, enzyme gene
for L- amino acid production 2002

20/8/69 (Item 60 from file: 357)

0291491 DBR Accession No.: 2002-13338

New polynucleotide from Coryneform bacteria coding for C4-dicarboxylate
transporter, useful for isolating nucleic acids, polynucleotides or
genes which code for C4-dicarboxylate transporter gene - recombinant
protein, vector expression in host cell, enzyme gene enhancement for L-
amino acid production 2002

20/8/70 (Item 61 from file: 357)

0291488 DBR Accession No.: 2002-13335

Polynucleotides from Coryneform bacteria, coding for the enzymatic cobalt
reducing gene product cobw, involved in the biosynthesis of L-amino
acids (e.g. L-lysine) - plasmid pCR2.1cobwint-mediated Corynebacterium
glutamicum protein gene transfer and expression in bacterium for
enzyme expression reduction and enahncement for amino acid
production 2002

20/8/71 (Item 62 from file: 357)

0291146 DBR Accession No.: 2002-12993

Novel polynucleotide from Coryneform bacteria coding for sigma factor E
gene, useful as hybridization probe for isolating nucleic acids,
polynucleotides or genes which code for sigE - Corynebacterium
glutamicum strain improvement for increased L- amino acid
production by fermentation 2002

20/8/72 (Item 63 from file: 357)

0290806 DBR Accession No.: 2002-12653

New polynucleotide sequence encoding the sigC gene useful for preparation
of L-amino acids e.g. lysine, and as hybridization probes for
discovering RNA, cDNA and DNA to isolate genes which code for sigma
factor C - L- amino acid production by fermentation of bacterium
containing the sigma factor-C gene 2002

20/8/73 (Item 64 from file: 357)

0290725 DBR Accession No.: 2002-12572

New sigM gene from coryneform bacteria useful as probe to isolate genes
which code for sigma factor M, and overexpression of which gene in
coryneform bacteria is useful for producing amino acids, especially
L-lysine - L- amino acid production by Corynebacterium glutamicum
fermentation 2002

20/8/74 (Item 65 from file: 357)

0290724 DBR Accession No.: 2002-12571

New sigH gene from coryneform bacteria useful as a probe to isolate genes
which code for sigma factor H, and overexpression of which gene in
coryneform bacteria is useful for producing amino acids, especially
L-lysine - L- amino acid production by Corynebacterium glutamicum
fermentation 2002

20/8/75 (Item 66 from file: 357)

0290723 DBR Accession No.: 2002-12570

New citB gene from coryneform bacteria useful as a probe to isolate genes

Untitled

which code for the CitB protein, and attenuation of which gene in coryneform bacteria is useful for producing amino acids, in particular L-lysine - L- amino acid production by fermentation of bacterium expressing the transcription regulator citB protein 2002

20/8/76 (Item 67 from file: 357)

0290119 DBR Accession No.: 2002-11966

New polynucleotides isolated from coryneform bacteria coding for the dep33 gene and a process for the fermentative preparation of amino acids using bacteria in which the dep33 gene are attenuated - gene overexpression in bacterium , useful for improved amino acid production 2002

20/8/77 (Item 68 from file: 357)

0290118 DBR Accession No.: 2002-11965

New polynucleotides isolated from coryneform bacteria coding for the clpC gene and a process for the fermentative preparation of amino acids using bacteria in which the clpC gene is attenuated - vector-mediated gene transfer and expression in Corynebacterium glutamicum host cell for strain improvement and L-amino acid preparation 2002

20/8/78 (Item 69 from file: 357)

0290117 DBR Accession No.: 2002-11964

New polynucleotides isolated from coryneform bacteria coding for the gpmB gene and a process for the fermentative preparation of amino acids using bacteria in which the gpmB gene is enhanced - vector-mediated gene transfer and expression in Corynebacterium glutamicum host cell for strain improvement and L-amino acid preparation 2002

20/8/79 (Item 70 from file: 357)

0290116 DBR Accession No.: 2002-11963

New polynucleotides isolated from coryneform bacteria coding for the luxS gene and a process for the fermentative preparation of amino acids using bacteria in which the luxS gene are attenuated - vector plasmid PCR2-mediated chra gene transfer and expression in Escherichia coli, fermentation, DNA primer, DNA probe, DNA chip and DNA microarray for use in L-lysine and L-amino-acid preparation, medicine and pharmaceutical industries and as feedstuff and food-additive 2002

20/8/80 (Item 71 from file: 357)

0290115 DBR Accession No.: 2002-11962

New polynucleotides isolated from coryneform bacteria coding for the chrs gene and a process for the fermentative preparation of amino acids using bacteria in which the chrs gene are attenuated - enhancing histidine-kinase activity in Corynebacterium glutamicum useful for amino acid production by fermentation 2002

20/8/81 (Item 72 from file: 357)

0290114 DBR Accession No.: 2002-11961

New polynucleotide isolated from coryneform bacteria coding for the gap2 gene and a process for the fermentative preparation of amino acids using bacteria in which the gap2 gene is enhanced - enhancing glyceraldehyde-3-phosphate-dehydrogenase activity in Corynebacterium glutamicum for L- amino acid production by fermentation 2002

Untitled

- 20/8/82 (Item 73 from file: 357)
0288832 DBR Accession No.: 2002-10679
Fermentative preparation of L-threonine by employing Enterobacteriaceae bacteria in which nucleotide sequence(s) that code(s) for malate:quinone oxidoreductase (mqo) gene are enhanced, particularly over-expressed - involving fermentation and vector-plasmid pMW218mqo-mediated malate, quinone oxidoreductase gene transfer and expression in Escherichia coli 2002
- 20/8/83 (Item 74 from file: 357)
0287880 DBR Accession No.: 2002-09727
New polynucleotides encoding glbO gene, useful as a primer for producing DNA of genes which code for the gene product of glbO, or as hybridization probes - vector-mediated gene transfer, expression in host cell, DNA probe and DNA primer for strain improvement 2001
- 20/8/84 (Item 75 from file: 357)
0283680 DBR Accession No.: 2002-05527
Fermentative production of L-threonine, useful in animal nutrition, comprises culturing enterobacterium with increased thrE gene activity - Escherichia coli fermentation containing deleted tdh gene and Corynebacterium glutamicum mutant thrE gene 2001
- 20/8/85 (Item 76 from file: 357)
0275830 DBR Accession No.: 2001-16037
Genetically engineered E. coli producing high yields of L-lysine - plasmid RSF24P, plasmid RSFD80, plasmid pCAB1, plasmid pCABD2, plasmid pCABD(B), plasmid pCABDE1-mediated gene transfer and expression in Escherichia coli for amino acid production 2001
- 20/8/86 (Item 77 from file: 357)
0270501 DBR Accession No.: 2001-10255
Proteins and their DNA useful for microbial production of L-amino acids - involving Corynebacterium thermoaminogenes 2001
- 20/8/87 (Item 78 from file: 357)
0246855 DBR Accession No.: 2000-01345
A microorganism Klebsiella, Erwinia or Pantoea, useful for production of L-glutamic acid - recombinant amino acid production 1999
- 20/8/88 (Item 79 from file: 357)
0246851 DBR Accession No.: 2000-01341
Metabolically engineered bacterial cell used in fermentation processes to produce oxaloacetate-derived organic acids for e.g. pharmaceuticals - recombinant threonine production via vector plasmid pTrc99A-pyc-mediated pyruvate - carboxylase gene transfer and expression in Escherichia coli for e.g. food industry 1999
- 20/8/89 (Item 80 from file: 357)
0238044 DBR Accession No.: 99-08145
Increasing microbial production of specific amino acids by increasing activity or expression of pyruvate - carboxylase - by modifying the gene, or increasing the copy number in the cell 1999
- 20/8/90 (Item 81 from file: 357)

b agric biochem

? d s

Set	Items	Description
S1	38	SELECT AU=PARK, YOUNG
S2	0	SELECT AU=LEE, BYOUNG
S3	277	SELECT AU=LEE, B
S4	0	S S3 AND THREONINE
S5	6	S S3 AND INACTIV?
S6	5	SELECT AU=KIM, DAE
S7	83	SELECT AU=LEE, JIN
S8	2	SELECT AU=CHO, JAE

? t s1/free/1-38

>>>W: "FREE" is not a valid format name in file(s): 399

1/8/1 (Item 1 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

04704693 EDB-01-053937

Title: Tunable Microstrip Antennas using Piezoelectric Substrates

Publication Date: May 2000

Descriptors: PIEZOELECTRICITY; ANTENNAS; RESONANCE; PZT; VARIATIONS; FREQUENCY MODULATION; FREQUENCY RESPONSE TESTING; TUNING

Broader Terms: ELECTRICITY; ELECTRICAL EQUIPMENT; LEAD COMPOUNDS; TITANATES; ZIRCONATES; MODULATION; TESTING; EQUIPMENT; OXYGEN COMPOUNDS; TITANIUM COMPOUNDS; ZIRCONIUM COMPOUNDS; TRANSITION ELEMENT COMPOUNDS

INIS Subject Categories: S42

K

1/8/2 (Item 2 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

04704661 EDB-01-053905

Title: Ferroelectric Properties of PZT Thin Films by Rapid Thermal Annealing

Publication Date: Apr 2000

Descriptors: PZT; THIN FILMS; FERROELECTRIC MATERIALS; ELECTRICAL PROPERTIES; DIELECTRIC PROPERTIES; ANNEALING; HEAT TREATMENTS; MAGNETRONS; SPUTTERING; HYSTERESIS; FATIGUE

Broader Terms: LEAD COMPOUNDS; TITANATES; ZIRCONATES; FILMS; DIELECTRIC MATERIALS; PHYSICAL PROPERTIES; ELECTRICAL PROPERTIES; HEAT TREATMENTS; MICROWAVE TUBES; MECHANICAL PROPERTIES; OXYGEN COMPOUNDS; TITANIUM COMPOUNDS; ZIRCONIUM COMPOUNDS; MATERIALS; ELECTRON TUBES; MICROWAVE EQUIPMENT; TRANSITION ELEMENT COMPOUNDS; ELECTRONIC EQUIPMENT

INIS Subject Categories: S42

K

1/8/3 (Item 1 from file: 393) Links

Title: Multiple-Dose, Safety, Pharmacokinetics and Pharmacodynamics of a New Selective Estrogen Receptor Modulator, ERA-923, in Healthy Postmenopausal Women
 Pub. Year: 2002

1/8/4 (Item 2 from file: 393) Links

Title: Density, Vapor Pressure, Solubility, and Viscosity for Water + Lithium Bromide + Lithium Nitrate + 1,3-Propanediol
 Pub. Year: 1997

1/8/5 (Item 3 from file: 393) Links

authorsearch1.txt

Title: Heat Capacities of the Water + Lithium Bromide + Ethanolamine and Water + Lithium Bromide + 1,3-Propanediol Systems
Pub. Year: 1997

1/8/6 (Item 4 from file: 393) Links

Title: Densities and Viscosities of the Water + Lithium Bromide + Ethanolamine System
Pub. Year: 1996

1/8/7 (Item 5 from file: 393) Links

Title: Solubilities and Vapor Pressures of the Water + Lithium Bromide + Ethanolamine System
Pub. Year: 1996

>>>W: "FREE" is not a valid format name in file(s): 399

? d s

Set	Items	Description
S1	38	SELECT AU=PARK, YOUNG
S2	0	SELECT AU=LEE, BYOUNG
S3	277	SELECT AU=LEE, B
S4	0	S S3 AND THREONINE
S5	6	S S3 AND INACTIV?
S6	5	SELECT AU=KIM, DAE
S7	83	SELECT AU=LEE, JIN
S8	2	SELECT AU=CHO, JAE

? t s5/free/1-6

>>>W: "FREE" is not a valid format name in file(s): 399

5/8/1 (Item 1 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002585931 IP Accession No: 5799152

Temporal Regulation of Light-Induced Extracellular Signal-Regulated Kinase Activation in the Suprachiasmatic Nucleus

Publication Date: 2003

Descriptors: Circadian rhythms; Suprachiasmatic nucleus; Map protein; Light effects; Laboratory animals

Identifiers: extracellular signal-regulated kinase

Subj Catg: 11142, Biological rhythms, clocks, and oscillations

5/8/2 (Item 2 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002537839 IP Accession No: 5825655

Plasmid P1 RepA Is Homologous to the F Plasmid RepE Class of Initiators

Publication Date: 2004

Descriptors: Replication; Plasmids; Mutants; Dimerization; Crystal structure; RepE protein; RepA protein

Subj Catg: 14650, General; 02760, Plasmids

5/8/3 (Item 3 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002420998 IP Accession No: 5450660

Inhibition of the Inositol Trisphosphate Receptor of Mouse Eggs and A7r5 Cells by KN-93 via a Mechanism Unrelated to Ca super(2+)/Calmodulin-dependent Protein Kinase II Antagonism

Publication Date: 2002

Descriptors: Eggs; Smooth muscle; Inositol 1,4,5-trisphosphate receptors; Ca super(2+)/calmodulin-dependent protein kinase II

Identifiers: mice; KN-93

Subj Catg: 20059, Phosphate and inositol phosphates

5/8/4 (Item 4 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002260667 IP Accession No: 5231869

AthKT1 is a salt tolerance determinant that controls Na super(+) entry into plant roots

Publication Date: 2001

Descriptors: Salinity tolerance; Sodium; Potassium; Calcium; AthKT1 protein; sos3 gene; hkt1 gene; Arabidopsis thaliana

Subj Catg: 07352, Dicotyledons (miscellaneous)

5/8/5 (Item 5 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0000880607 IP Accession No: 2182364

The extracellular acid phosphatase of the mosquito-parasitizing fungus Lagenidium giganteum .

Publication Date: 1989

Descriptors: enzymes; acid phosphatase; Culicidae; Culicidae

Identifiers: Lagenidium giganteum; secretion; pathogenicity; acid phosphatase

Subj Catg: 03020, Fungi; 16860, Mechanisms of enzyme action, including enzyme kinetics ; 30513, Pest control; 03088, Fungi: animal

5/8/6 (Item 1 from file: 136) Links

BioEngineering Abstracts

(c) 2006 CSA. All rights reserved.

0000139083 IP Accession No: 5621494

Mutants of Immunotoxin Anti-Tac(dsFv)-PE38 with Variable Number of Lysine Residues as Candidates for Site-Specific Chemical Modification. 1. Properties of Mutant Molecules

Publication Date: 2003

Descriptors: Immunotoxins; Drug delivery; Proteins; Toxins; Fv; lysine

Identifiers: chemical modification; residues

Subj Catg: 130, General Biomedical Engineering: Tools & Techniques

? d s

Set Items Description

authorsearch1.txt

S1	38	SELECT AU=PARK, YOUNG
S2	0	SELECT AU=LEE, BYOUNG
S3	277	SELECT AU=LEE, B
S4	0	S S3 AND THREONINE
S5	6	S S3 AND INACTIV?
S6	5	SELECT AU=KIM, DAE
S7	83	SELECT AU=LEE, JIN
S8	2	SELECT AU=CHO, JAE

? t s6/free/1-5

>>>W: "FREE" is not a valid format name in file(s): 399

6/8/1 (Item 1 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002268460 IP Accession No: 5217676

Oral cancer in vivo gene expression profiling assisted by laser capture microdissection and microarray analysis

Publication Date: 2001

Descriptors: Transcription factors; Gene expression; Oligonucleotides; Oncogenes; Tumor suppressor genes; Tumorigenesis; oral cancer; microarrays; Oral cavity; Epithelium; Databases; Carcinogenesis; DNA microarrays

Identifiers: man

Subj Catg: 14510, Occurrence, isolation & assay; 26000, ONCOGENES AND GROWTH

FACTORS: GENERAL

>>>W: "FREE" is not a valid format name in file(s): 399

? d s

Set	Items	Description
S1	38	SELECT AU=PARK, YOUNG
S2	0	SELECT AU=LEE, BYOUNG
S3	277	SELECT AU=LEE, B
S4	0	S S3 AND THREONINE
S5	6	S S3 AND INACTIV?
S6	5	SELECT AU=KIM, DAE
S7	83	SELECT AU=LEE, JIN
S8	2	SELECT AU=CHO, JAE

? t s7/free/1-83

>>>W: "FREE" is not a valid format name in file(s): 399

7/8/1 (Item 1 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002663135 IP Accession No: 6164535

Modeling In Vivo Pharmacokinetics and Pharmacodynamics of Moxifloxacin Therapy for Mycobacterium tuberculosis Infection by Using a Novel Cartridge System

Publication Date: 2005

Descriptors: Moxifloxacin; Pharmacokinetics; Chemotherapy; Infection; Tuberculosis; Antimicrobial agents; Pharmacodynamics; Mycobacterium tuberculosis

Subj Catg: 02845, Ear, nose and respiratory tract; 01065, Antimycobacterial

7/8/2 (Item 1 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

05463330 DEN; RN05124393; TVI 0521

Title: Prostate cancer: a comparative study of {sup 11}C-choline PET and MR imaging combined with proton MR spectroscopy

Publication Date: 20050701
Availability Date: 20060216
Descriptors: CARBON 11; CARCINOMAS; CHOLINE; LABELLED COMPOUNDS; NMR IMAGING;
POSITRON COMPUTED TOMOGRAPHY; PROSTATE
Subject Categories: 62 -- RADIOLOGY & NUCLEAR MEDICINE

7/8/3 (Item 2 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

05413493 DEN; RN05124393; TVI 0521

Title: Prostate cancer: a comparative study of {sup 11}C-choline PET and MR imaging
combined with proton MR spectroscopy

Publication Date: 20050701

Availability Date: 20051212

Descriptors: CARBON 11; CARCINOMAS; CHOLINE; LABELLED COMPOUNDS; NMR IMAGING;
POSITRON COMPUTED TOMOGRAPHY; PROSTATE

Subject Categories: 62 -- RADIOLOGY & NUCLEAR MEDICINE

7/8/4 (Item 3 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

05406956 INIS; RN05113259; TVI 3639

Title: Identification of the segmental artery feeding the anterior spinal artery.
Correlation between helical CT and angiography

Publication Date: 20050601

Availability Date: 20051128

Descriptors: ARTERIES; BIOMEDICAL RADIOGRAPHY; BLOOD FLOW; CAT SCANNING; CONTRAST
MEDIA; HEPATOMAS; LIVER; PERITONEUM; SPINAL CORD; VERTEBRAE

Subject Categories: 62 -- RADIOLOGY & NUCLEAR MEDICINE

7/8/5 (Item 4 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

05357625 KRN; RN05071034; TVI 3625; TRN KR0501340054002

Title: Study on structure of target organs in radiation protection for reference
Korean

Publication Date: 20020701

Availability Date: 20050731

Descriptors: ANATOMY; DOSIMETRY; NMR IMAGING; RADIATION DOSES; RADIATION PROTECTION;
REPUBLIC OF KOREA

Subject Categories: 61 -- RADIATION PROTECTION & DOSIMETRY

7/8/6 (Item 5 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

05188135 DEN; RN04140406; TVI 0424; TRN DE04FE119

Title: Value of {sup 18}F-FDG PET in the detection of peritoneal carcinomatosis

Publication Date: 20041001

Availability Date: 20050114

Descriptors: RADIOPHARMACEUTICALS; FLUORINE 18; POSITRON COMPUTED TOMOGRAPHY;
DIAGNOSIS; PATIENTS; FLUORODEOXYGLUCOSE; PERITONEUM; CARCINOMAS; ACCURACY;
COMPUTERIZED TOMOGRAPHY; UPTAKE

Subject Categories: 62 -- RADIOLOGY & NUCLEAR MEDICINE

7/8/7 (Item 6 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

05183987 DEN; RN04140406; TVI 0424; TRN DE04FE119

authorsearch1.txt

Title: Value of {sup 18}F-FDG PET in the detection of peritoneal carcinomatosis
Publication Date: 20041001
Availability Date: 20041227
Descriptors: RADIOPHARMACEUTICALS; FLUORINE 18; POSITRON COMPUTED TOMOGRAPHY;
DIAGNOSIS; PATIENTS; FLUORODEOXYGLUCOSE; PERITONEUM; CARCINOMAS; ACCURACY;
COMPUTERIZED TOMOGRAPHY; UPTAKE
Subject Categories: 62 -- RADIOLOGY & NUCLEAR MEDICINE

7/8/8 (Item 7 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

05149191 INIS; RN04112021; TVI 3540; TRN JP0403363083790

Title: Clinical evaluation of choline measurement by proton MR spectroscopy in patients with malignant tumors

Publication Date: 20040601

Availability Date: 20041101

Descriptors: CARCINOMAS; CHOLINE; GADOLINIUM COMPLEXES; MAMMARY GLANDS; NMR IMAGING;
PROSTATE; PROTONS; SENSITIVITY; SPECTROSCOPY; SPIN-LATTICE RELAXATION; SPIN-SPIN
RELAXATION; UROGENITAL SYSTEM DISEASES

Subject Categories: 62 -- RADIOLOGY & NUCLEAR MEDICINE

7/8/9 (Item 8 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

04993016 KR

Title: A Vacuum Circuit Breaker Model for simulation of Transient Overvoltages Using the PSCAD/EMTDC

Publication Date: 20020701

Availability Date: 20031110

Descriptors: CIRCUIT BREAKERS; SIMULATION; TRANSIENTS; OVERVOLTAGE; QUENCHING

Subject Categories: 42 -- ENGINEERING

7/8/10 (Item 9 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

04992227 KR

Title: Development of Superconducting Fault Current Limiter using RTDS

Publication Date: 20020701

Availability Date: 20031110

Descriptors: SIMULATORS; LIMITERS; SIMULATION

Subject Categories: 42 -- ENGINEERING

7/8/11 (Item 10 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

04980342 DEN

Title: Performance evaluation of a hand-held, semiconductor (CdZnTe)-based gamma camera

Publication Date: 20030601

Availability Date: 20030929

Descriptors: GAMMA CAMERAS; HANDS; PERFORMANCE; CDTE SEMICONDUCTOR DETECTORS;
COLLIMATORS; SENSITIVITY; SPATIAL RESOLUTION; ENERGY RESOLUTION

Subject Categories: 46 -- INSTRUMENTATION RELATED TO NUCLEAR SCIENCE & TECHNOLOGY
62 -- RADIOLOGY & NUCLEAR MEDICINE

7/8/12 (Item 11 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

04938994 KRN

Title: Estimation of absorbed dose for nonuniformly distributed I-131 in tumor

Publication Date: 20000501

Availability Date: 20030519

Descriptors: IODINE 131; MONTE CARLO METHOD; NEOPLASMS; PATIENTS; RADIATION DOSE DISTRIBUTIONS; RADIATION DOSES; RADIOTHERAPY; THYROID

Subject Categories: 61 -- RADIATION PROTECTION & DOSIMETRY

7/8/13 (Item 12 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

04883611 KRN

Title: Dosimetry and MIRD for Re-188 liquid balloons

Publication Date: 19990701

Availability Date: 20021230

Descriptors: BALLOONS; BLADDER; BLOOD; COMPUTER CALCULATIONS; DOSIMETRY; RHENIUM 188

Subject Categories: 62 -- RADIOLOGY & NUCLEAR MEDICINE

7/8/14 (Item 13 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

04883288 KRN

Title: Estimation of the radiation dose to thyroidectomized patients with differentiated thyroid cancer after I-131 therapy

Publication Date: 20000701

Availability Date: 20021223

Descriptors: IODINE 131; M CODES; NEOPLASMS; PATIENTS; RADIATION DOSES; RADIOTHERAPY; THYROID; THYROIDECTOMY

Subject Categories: 62 -- RADIOLOGY & NUCLEAR MEDICINE

7/8/15 (Item 14 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

04883262 KRN

Title: Labeling and biodistribution of Re-188-DTPA (diethylenetriaminepentaacetic acid)

Publication Date: 19970701

Availability Date: 20021223

Descriptors: DTPA; GAMMA RADIATION; RADIOISOTOPES; RADIOTHERAPY; RHENIUM 188; URINARY TRACT

Subject Categories: 62 -- RADIOLOGY & NUCLEAR MEDICINE

7/8/16 (Item 15 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

04881638 KRN

Title: Dosimetry and medical internal radiation dose of Re-188-DTPA for endovascular balloon brachytherapy against restenosis after coronary angioplasty

Publication Date: 19990201

Availability Date: 20021223

Descriptors: BALLOONS; DOGS; DOSIMETRY; DTPA; KIDNEYS; M CODES; RADIATION DOSES; RHENIUM 188

Subject Categories: 62 -- RADIOLOGY & NUCLEAR MEDICINE

7/8/17 (Item 16 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

authorsearch1.txt

04780571 RN02008048; TVI 0202; TRN KR02E00365; KR
Title: A Web-based Educational Tool for the Power System Engineering
Publication Date: 20010701
Availability Date: 20020304
Descriptors: POWER SYSTEMS; EDUCATION; EDUCATIONAL TOOLS; SIMULATORS; STABILITY;
DATA ANALYSIS; FLOW MODELS
Subject Categories: 24 -- POWER TRANSMISSION & DISTRIBUTION
29 -- ENERGY PLANNING, POLICY & ECONOMY

7/8/18 (Item 17 from file: 103) Links
Energy SciTec
(c) 2006 Contains copyrighted material. All rights reserved.
04776986 RN02008155; TVI 0202; TRN KR02E00472; KR
Title: The study on ferroresonant suppression filters of CVT
Publication Date: 20010701
Availability Date: 20020304
Descriptors: FILTERS; POWER SYSTEMS; CAPACITY; TRANSFORMERS; FERROMAGNETIC
RESONANCE; REAL TIME SYSTEMS; SIMULATORS
Subject Categories: 24 -- POWER TRANSMISSION & DISTRIBUTION

7/8/19 (Item 18 from file: 103) Links
Energy SciTec
(c) 2006 Contains copyrighted material. All rights reserved.
04561862 EDB-00-029640
Title: Dosimetry of rhenium-188 diethylene triamine penta-acetic acid for
endovascular intra-balloon brachytherapy after coronary angioplasty
Publication Date: Jan 2000
Descriptors: DOSIMETRY; RHENIUM 188; RHENIUM COMPLEXES; DTPA; RADIOPHARMACEUTICALS;
FILM DOSIMETRY; CALCULATION METHODS; BALLOONS; CORONARIES; SURGERY; RADIATION DOSE
DISTRIBUTIONS; PHANTOMS; COMPUTER CALCULATIONS; RADIOTHERAPY; FEASIBILITY STUDIES
Broader Terms: BETA-MINUS DECAY RADIOISOTOPES; HEAVY NUCLEI; HOURS LIVING
RADIOISOTOPES; INTERNAL CONVERSION RADIOISOTOPES; ISOMERIC TRANSITION ISOTOPES;
MINUTES LIVING RADIOISOTOPES; ODD-ODD NUCLEI; RHENIUM ISOTOPES; TRANSITION ELEMENT
COMPLEXES; AMINO ACIDS; CHELATING AGENTS; RADIOPROTECTIVE SUBSTANCES; DRUGS ;
LABELLED COMPOUNDS; DOSIMETRY; AIRCRAFT; ARTERIES; MEDICINE; MOCKUP; RADIOLOGY;
THERAPY; BETA DECAY RADIOISOTOPES; NUCLEI; RADIOISOTOPES; ISOTOPES; COMPLEXES;
CARBOXYLIC ACIDS; BLOOD VESSELS; STRUCTURAL MODELS; NUCLEAR MEDICINE; ORGANIC ACIDS;
CARDIOVASCULAR SYSTEM; ORGANS; ORGANIC COMPOUNDS; BODY
Subject Categories:
INIS Subject Categories: S61
S62*

7/8/20 (Item 19 from file: 103) Links
Energy SciTec
(c) 2006 Contains copyrighted material. All rights reserved.
04146866 KR-97-000098; EDB-97-055570
Title: Dielectric and strain properties of $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ - PbTiO_3 ceramic with respect to the variation of SrTiO_3 substitution
Publication Date: Feb 1996
Major Descriptors: *CERAMICS -- PHYSICAL PROPERTIES
Descriptors: CRYSTAL-PHASE TRANSFORMATIONS; DIELECTRIC PROPERTIES; PIEZOELECTRICITY;
STRAINS
Broader Terms: ELECTRICAL PROPERTIES; ELECTRICITY; PHASE TRANSFORMATIONS; PHYSICAL
PROPERTIES
Subject Categories: 360200* -- Ceramics, Cermets, & Refractories

7/8/21 (Item 20 from file: 103) Links
Energy SciTec
(c) 2006 Contains copyrighted material. All rights reserved.

authorsearch1.txt

03347242 AIX-23-048496; EDB-92-109999

Title: Stability of a transition boundary layer flow over an exciting plate

Publication Date: Aug 1991

Major Descriptors: *BOUNDARY LAYERS -- PLATES; *TRANSITION FLOW -- BOUNDARY LAYERS;
*TRANSITION FLOW -- STABILITY

Descriptors: ENERGY BALANCE; REYNOLDS NUMBER; VISCOUS FLOW; VORTEX FLOW

Broader Terms: FLUID FLOW; LAYERS

Subject Categories: 420400* -- Engineering -- Heat Transfer & Fluid Flow

INIS Subject Categories: E1100* -- Thermodynamics & Fluid Flow

7/8/22 (Item 21 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

02288797 AIX-20-018983; EDB-89-034533

Title: Effects of superficial liquid velocity on statistical moments related to flow patterns in a vertical upward two phase flow

Publication Date: Jul 1987

Major Descriptors: *LIQUID FLOW -- VELOCITY; *TWO-PHASE FLOW -- FLOW MODELS;
*TWO-PHASE FLOW -- VOID FRACTION

Broader Terms: FLUID FLOW; MATHEMATICAL MODELS

Subject Categories: 420400* -- Engineering -- Heat Transfer & Fluid Flow

INIS Subject Categories: E1100* -- Thermodynamics & Fluid Flow

7/8/23 (Item 22 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

02005036 AIX-18-064344; EDB-87-132709

Title: Characteristics of creep deformation in Al-2.8%Mg alloy at high temperature

Publication Date: Oct 1986

Major Descriptors: *ALUMINIUM ALLOYS -- CREEP; *ALUMINIUM ALLOYS -- DEFORMATION

Descriptors: HIGH TEMPERATURE

Broader Terms: ALLOYS; MECHANICAL PROPERTIES

Subject Categories: 360103* -- Metals & Alloys -- Mechanical Properties

INIS Subject Categories: B2230* -- Metals & Alloys -- Mechanical properties

7/8/24 (Item 1 from file: 393) Links

Title: Modeling In Vivo Pharmacokinetics and Pharmacodynamics of Moxifloxacin Therapy for Mycobacterium tuberculosis Infection by Using a Novel Cartridge System
Pub. Year: 2005

7/8/25 (Item 2 from file: 393) Links

Title: Mechanism of Action of Brazilin on Gluconeogenesis in Isolated Rat Hepatocytes

Pub. Year: 2004

7/8/26 (Item 3 from file: 393) Links

Title: Steady-state pharmacokinetic interaction of modified-dose indinavir and rifabutin

Pub. Year: 2003

7/8/27 (Item 4 from file: 393) Links

Title: Toxicities of ¹⁶⁶Holmium-chitosan in Mice

Pub. Year: 1998

authorsearch1.txt

>>>W: "FREE" is not a valid format name in file(s): 399

? t s8/free/1-2

>>>W: "FREE" is not a valid format name in file(s): 399

? t s8/free/1-2

>>>W: "FREE" is not a valid format name in file(s): 399

? d s

Set	Items	Description
S1	38	SELECT AU=PARK, YOUNG
S2	0	SELECT AU=LEE, BYOUNG
S3	277	SELECT AU=LEE, B
S4	0	S S3 AND THREONINE
S5	6	S S3 AND INACTIV?
S6	5	SELECT AU=KIM, DAE
S7	83	SELECT AU=LEE, JIN
S8	2	SELECT AU=CHO, JAE

? t s8/free/1-2

>>>W: "FREE" is not a valid format name in file(s): 399

? t s8/free/1

>>>W: "FREE" is not a valid format name in file(s): 399

? t s8/free/1-2

>>>W: "FREE" is not a valid format name in file(s): 399

? t s8/free/all

>>>W: "FREE" is not a valid format name in file(s): 399

? t s8/free/all

>>>W: "FREE" is not a valid format name in file(s): 399

? d s

Set	Items	Description
S1	38	SELECT AU=PARK, YOUNG
S2	0	SELECT AU=LEE, BYOUNG
S3	277	SELECT AU=LEE, B
S4	0	S S3 AND THREONINE
S5	6	S S3 AND INACTIV?
S6	5	SELECT AU=KIM, DAE
S7	83	SELECT AU=LEE, JIN
S8	2	SELECT AU=CHO, JAE

? t s8/medium,k/1-2

>>>W: KWIC option is not available in file(s): 399

8/K/1 (Item 1 from file: 399) Links

Fulltext available through: USPTO Full Text Retrieval Options SCIENCEDIRECT

CA SEARCH(R)

(c) 2006 American Chemical Society. All rights reserved.

138150956

CA: 138(11)150956y

JOURNAL

Fibroblast growth factor receptor (FGFR) mutations in achondroplasia and related skeletal dysplasias

Author: Rasar, Melissa A.; Cho, Jae; Lunstrum, Gregory P.; Horton, William A.

Location: Research Center, Shriners Hospital for Children, Portland, OR, USA

Journal: Biomed. Health Res.

Date: 2002

Volume: 54 Number: Growth Plate Pages: 175-181

CODEN: BIHREN

ISSN: 0929-6743
 Language: English
 Publisher: IOS Press

8/K/2 (Item 2 from file: 399) Links
 Fulltext available through: ScienceDirect (Elsevier) USPTO Full Text
 Retrieval Options SCIENCEDIRECT
 CA SEARCH(R)
 (c) 2006 American Chemical Society. All rights reserved.

137019253 CA: 137(2)19253d JOURNAL
 Immunostimulatory DNA mediates inhibition of eosinophilic inflammation and airway hyperreactivity independent of natural killer cells in vivo
 Author: Broide, David H.; Stachnick, Greg; Castaneda, Diego; Nayar, Jyothi; Miller, Marina; Cho, Jae; Rodriguez, Monica; Roman, Mark; Raz, Eyal
 Location: Department of Medicine, University of California, San Diego, CA, 92093-0635, USA
 Journal: J. Allergy Clin. Immunol.
 Date: 2001
 Volume: 108 Number: 5 Pages: 759-763
 CODEN: JACIBY
 ISSN: 0091-6749
 Language: English
 Publisher: Mosby, Inc.

? d s

Set	Items	Description
S1	38	SELECT AU=PARK, YOUNG
S2	0	SELECT AU=LEE, BYOUNG
S3	277	SELECT AU=LEE, B
S4	0	S S3 AND THREONINE
S5	6	S S3 AND INACTIV?
S6	5	SELECT AU=KIM, DAE
S7	83	SELECT AU=LEE, JIN
S8	2	SELECT AU=CHO, JAE

? s s1 and threonine

	38	S1
	193845	THREONINE
S9	0	S S1 AND THREONINE

? d s

Set	Items	Description
S1	38	SELECT AU=PARK, YOUNG
S2	0	SELECT AU=LEE, BYOUNG
S3	277	SELECT AU=LEE, B
S4	0	S S3 AND THREONINE
S5	6	S S3 AND INACTIV?
S6	5	SELECT AU=KIM, DAE
S7	83	SELECT AU=LEE, JIN
S8	2	SELECT AU=CHO, JAE
S9	0	S S1 AND THREONINE
S10	199	SELECT AU=PARK, Y
S11	0	S S10 AND THREONINE
S12	0	S S10 AND INACTIV
S13	0	S S10 AND PCKA
S14	0	S S1 AND PCKA
S15	20541	SELECT AU=PARK, Y?
S16	18	S S15 AND THREONINE

authorsearch1.txt

```
? select au=lee, b?
S17      19035  SELECT AU=LEE, B?

? s s17 and threonine
      19035  S17
      193845  THREONINE
S18      19  S S17 AND THREONINE

? s s6 and threonine
      5  S6
      193845  THREONINE
S19      0  S S6 AND THREONINE

? select au=kim, d?
>>>W: File 399 processing for AU=KIM, D? stopped at AU=KIM, DUCK HWAN
S20      32702  SELECT AU=KIM, D?

? s s20 and threonine
      32702  S20
      193845  THREONINE
S21      39  S S20 AND THREONINE

? d s
Set      Items  Description
S1        38  SELECT AU=PARK, YOUNG
S2         0  SELECT AU=LEE, BYOUNG
S3        277  SELECT AU=LEE, B
S4         0  S S3 AND THREONINE
S5         6  S S3 AND INACTIV?
S6         5  SELECT AU=KIM, DAE
S7        83  SELECT AU=LEE, JIN
S8         2  SELECT AU=CHO, JAE
S9         0  S S1 AND THREONINE
S10       199  SELECT AU=PARK, Y
S11        0  S S10 AND THREONINE
S12        0  S S10 AND INACTIV
S13        0  S S10 AND PCKA
S14        0  S S1 AND PCKA
S15      20541  SELECT AU=PARK, Y?
S16        18  S S15 AND THREONINE
S17      19035  SELECT AU=LEE, B?
S18        19  S S17 AND THREONINE
S19         0  S S6 AND THREONINE
S20      32702  SELECT AU=KIM, D?
S21        39  S S20 AND THREONINE

? s s7 and threonine
      83  S7
      193845  THREONINE
S22      0  S S7 AND THREONINE

? select au=lee, j?
>>>W: File 399 processing for AU=LEE, J? stopped at AU=LEE, JEONG SANG
S23      67146  SELECT AU=LEE, J?

? s s23 and threonine
      67146  S23
      193845  THREONINE
S24      87  S S23 AND THREONINE

? s s8 and threonine
      2  S8
```

193845 THREONINE
S25 0 S S8 AND THREONINE

? select au=cho, j?
S26 7595 SELECT AU=CHO, J?

? s s26 and threonine
7595 S26
193845 THREONINE
S27 17 S S26 AND THREONINE

? d s

Set	Items	Description
S1	38	SELECT AU=PARK, YOUNG
S2	0	SELECT AU=LEE, BYOUNG
S3	277	SELECT AU=LEE, B
S4	0	S S3 AND THREONINE
S5	6	S S3 AND INACTIV?
S6	5	SELECT AU=KIM, DAE
S7	83	SELECT AU=LEE, JIN
S8	2	SELECT AU=CHO, JAE
S9	0	S S1 AND THREONINE
S10	199	SELECT AU=PARK, Y
S11	0	S S10 AND THREONINE
S12	0	S S10 AND INACTIV
S13	0	S S10 AND PCKA
S14	0	S S1 AND PCKA
S15	20541	SELECT AU=PARK, Y?
S16	18	S S15 AND THREONINE
S17	19035	SELECT AU=LEE, B?
S18	19	S S17 AND THREONINE
S19	0	S S6 AND THREONINE
S20	32702	SELECT AU=KIM, D?
S21	39	S S20 AND THREONINE
S22	0	S S7 AND THREONINE
S23	67146	SELECT AU=LEE, J?
S24	87	S S23 AND THREONINE
S25	0	S S8 AND THREONINE
S26	7595	SELECT AU=CHO, J?
S27	17	S S26 AND THREONINE

? s s24 and inactivat? or delet? or attenut?
87 S24
732247 INACTIVAT?
920457 DELET?
269 ATTENUT?
S28 920723 S S24 AND INACTIVAT? OR DELET? OR ATTENUT?

? d s

Set	Items	Description
S1	38	SELECT AU=PARK, YOUNG
S2	0	SELECT AU=LEE, BYOUNG
S3	277	SELECT AU=LEE, B
S4	0	S S3 AND THREONINE
S5	6	S S3 AND INACTIV?
S6	5	SELECT AU=KIM, DAE
S7	83	SELECT AU=LEE, JIN
S8	2	SELECT AU=CHO, JAE
S9	0	S S1 AND THREONINE
S10	199	SELECT AU=PARK, Y
S11	0	S S10 AND THREONINE
S12	0	S S10 AND INACTIV
S13	0	S S10 AND PCKA

authorsearch1.txt

S14	0	S S1 AND PCKA
S15	20541	SELECT AU=PARK, Y?
S16	18	S S15 AND THREONINE
S17	19035	SELECT AU=LEE, B?
S18	19	S S17 AND THREONINE
S19	0	S S6 AND THREONINE
S20	32702	SELECT AU=KIM, D?
S21	39	S S20 AND THREONINE
S22	0	S S7 AND THREONINE
S23	67146	SELECT AU=LEE, J?
S24	87	S S23 AND THREONINE
S25	0	S S8 AND THREONINE
S26	7595	SELECT AU=CHO, J?
S27	17	S S26 AND THREONINE
S28	920723	S S24 AND INACTIVAT? OR DELET? OR ATTENUT?

? d s

Set	Items	Description
S1	38	SELECT AU=PARK, YOUNG
S2	0	SELECT AU=LEE, BYOUNG
S3	277	SELECT AU=LEE, B
S4	0	S S3 AND THREONINE
S5	6	S S3 AND INACTIV?
S6	5	SELECT AU=KIM, DAE
S7	83	SELECT AU=LEE, JIN
S8	2	SELECT AU=CHO, JAE
S9	0	S S1 AND THREONINE
S10	199	SELECT AU=PARK, Y
S11	0	S S10 AND THREONINE
S12	0	S S10 AND INACTIV
S13	0	S S10 AND PCKA
S14	0	S S1 AND PCKA
S15	20541	SELECT AU=PARK, Y?
S16	18	S S15 AND THREONINE
S17	19035	SELECT AU=LEE, B?
S18	19	S S17 AND THREONINE
S19	0	S S6 AND THREONINE
S20	32702	SELECT AU=KIM, D?
S21	39	S S20 AND THREONINE
S22	0	S S7 AND THREONINE
S23	67146	SELECT AU=LEE, J?
S24	87	S S23 AND THREONINE
S25	0	S S8 AND THREONINE
S26	7595	SELECT AU=CHO, J?
S27	17	S S26 AND THREONINE
S28	920723	S S24 AND INACTIVAT? OR DELET? OR ATTENUT?
S29	18	S S16
S30	17	RD (unique items)
S31	19	S S18
S32	16	RD (unique items)
S33	39	S S21
S34	35	RD (unique items)
S35	87	S S24
S36	75	RD (unique items)
S37	17	S S27
S38	16	RD (unique items)

? t s30/free/1-17

>>>W: "FREE" is not a valid format name in file(s): 399

30/8/1 (Item 1 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002641135 IP Accession No: 6090781

Proteomic response analysis of a threonine-overproducing mutant of *Escherichia coli*

Publication Date: 2004

Descriptors: Threonine; Malate dehydrogenase; Citrate (si)-synthase; oxaloacetic acid; Aspartate ammonia-lyase; Aspartic acid; L- Threonine 3-dehydrogenase; Cystathionine beta -lyase; *Escherichia coli*

Identifiers: homoserine

Subj Catg: 07320, Bacterial genetics; 02727, Amino acids, peptides and proteins

30/8/2 (Item 2 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002077777 IP Accession No: 4688447

Influence of osmotic and nutritional stress on physiology of *Penicillium fellutanum* in removal of phosphocholine and modification of phospho-1-O-[N-peptidyl-(2-aminoethanol)] phosphodiester of peptidophosphogalactomannan species

Publication Date: 2000

Descriptors: Osmotic stress; N.M.R.; Glycine; Nutritional shifts;

Peptidophosphogalactomannan;

Phospho-1-O-[N-peptidyl-(2-aminoethanol)]phosphodiester; Serine; Threonine;

Penicillium fellutanum

Subj Catg: 03074, Fungi

30/8/3 (Item 3 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0001222487 IP Accession No: 2898485

Mutagenicity of Maillard reaction products from D-glucose-amino acid mixtures and possible roles of active oxygens in the mutagenicity.

Publication Date: 1991

Descriptors: amino acids; mutagenicity; free radicals; products; *Salmonella typhimurium*

Identifiers: Maillard reaction; glucose

Subj Catg: 07221, Specific chemicals

30/8/4 (Item 1 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0004078018 CAB Accession Number: 19721405107

Gas-liquid chromatographic determination of amino acids in some Korean foods.

Publication Year: 1969

Descriptors: foods; amino acids; alanine; valine; asparagine; glutamic acid; leucine; proline; threonine; phenylalanine; lysine

Identifiers: Korean; Korean foods; Korea; South; amino acids in foods

CAS Registry Numbers: 56-41-7; 72-18-4; 70-47-3; 56-86-0; 61-90-5; 147-85-3;

72-19-5; 63-91-2; 56-87-1

CABICodes: Food Composition and Quality (QQ500)

30/8/5 (Item 1 from file: 143) Links

Biol. & Agric. Index

(c) 2006 The HW Wilson Co. All rights reserved.

1796948 H.W. Wilson Record Number: BBAI04133261

Follicle-stimulating Hormone Activation of Hypoxia-inducible Factor-1 by the Phosphatidylinositol 3-Kinase/AKT/Ras Homolog Enriched in Brain (Rheb)/Mammalian Target of Rapamycin (mTOR) Pathway Is Necessary for Induction of Select Protein Markers of Follicular Differentiation

Descriptors: Follicle-stimulating hormone; Serine-threonine kinase; mTOR protein; Hypoxia-inducible factors
20040507

30/8/6 (Item 1 from file: 305) Links

407941

Proteome analysis of human monocytic THP-1 cells primed with oxidized low-density lipoproteins.

PD- Feb 2006 ; 20060200 |

>>>W: "FREE" is not a valid format name in file(s): 399

? d s

Set	Items	Description
S1	38	SELECT AU=PARK, YOUNG
S2	0	SELECT AU=LEE, BYOUNG
S3	277	SELECT AU=LEE, B
S4	0	S S3 AND THREONINE
S5	6	S S3 AND INACTIV?
S6	5	SELECT AU=KIM, DAE
S7	83	SELECT AU=LEE, JIN
S8	2	SELECT AU=CHO, JAE
S9	0	S S1 AND THREONINE
S10	199	SELECT AU=PARK, Y
S11	0	S S10 AND THREONINE
S12	0	S S10 AND INACTIV
S13	0	S S10 AND PCKA
S14	0	S S1 AND PCKA
S15	20541	SELECT AU=PARK, Y?
S16	18	S S15 AND THREONINE
S17	19035	SELECT AU=LEE, B?
S18	19	S S17 AND THREONINE
S19	0	S S6 AND THREONINE
S20	32702	SELECT AU=KIM, D?
S21	39	S S20 AND THREONINE
S22	0	S S7 AND THREONINE
S23	67146	SELECT AU=LEE, J?
S24	87	S S23 AND THREONINE
S25	0	S S8 AND THREONINE
S26	7595	SELECT AU=CHO, J?
S27	17	S S26 AND THREONINE
S28	920723	S S24 AND INACTIVAT? OR DELET? OR ATTENUT?
S29	18	S S16
S30	17	RD (unique items)
S31	19	S S18
S32	16	RD (unique items)
S33	39	S S21
S34	35	RD (unique items)
S35	87	S S24
S36	75	RD (unique items)
S37	17	S S27
S38	16	RD (unique items)

? t s32/free/1-16

>>>W: "FREE" is not a valid format name in file(s): 399

32/8/1 (Item 1 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002752080 IP Accession No: 6414659

Properties of WNK1 and Implications for Other Family Members

Publication Date: 2005

Descriptors: Protein-serine/threonine kinase; Hypertension; Kidney;
pseudohypoaldosteronism

Identifiers: man; WNK1 protein; hypotonicity; WNK4 protein; WNK2 protein

Subj Catg: 07431, Enzymes

32/8/2 (Item 2 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002604504 IP Accession No: 5979004

Crystal Structure of the Kinase Domain of WNK1, a Kinase that Causes a Hereditary
Form of Hypertension

Publication Date: 2004

Descriptors: Hypertension; pseudohypoaldosteronism; Crystal structure; Active sites;
Protein kinase; Substrate specificity

Identifiers: WNK1 protein

Subj Catg: 07432, Proteins

32/8/3 (Item 3 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002504683 IP Accession No: 5701593

Global Analyses of Transcriptomes and Proteomes of a Parent Strain and an L-
Threonine-Overproducing Mutant Strain

Publication Date: 2003

Descriptors: Nucleotide sequence; Gene regulation; Threonine; Ribosomal proteins;
transcriptomes; proteomes; aceA gene; aceB gene; gltA gene; icdA gene; glnA gene;
leu gene; yigJ gene; yfiD gene; hdeB gene; hdeA gene; oppA gene; thrA gene; proA
gene; thrC gene; dadA gene; dadX gene; ompF gene; oppB gene; oppF gene; thrA345
gene; lva97 gene; thrB gene; Escherichia coli

Subj Catg: 07320, Bacterial genetics; 02740, Genetics and evolution

32/8/4 (Item 4 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002014724 IP Accession No: 4610799

Cloning and characterization of a nuclear S6 kinase, S6 kinase-related kinase (SRK);
A novel nuclear target of Akt

Publication Date: 1999

Descriptors: 1-Phosphatidylinositol 3-kinase; Akt gene; SRK gene; S6 kinase-related
kinase; p70 protein; wortmannin; rapamycin; Ribosomal protein S6 kinases

Identifiers: cloning; nucleotide sequence; amino acid sequence prediction

Subj Catg: 14640, Structure & sequence; 07381, General; 26170, Other oncogenes &
GF's with serine-threonine kinase activity

32/8/5 (Item 5 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0000860754 IP Accession No: 2144834

Xenopus homolog of the mos protooncogene transforms mammalian fibroblasts and induces maturation of Xenopus oocytes.

Publication Date: 1989

Descriptors: genes

Identifiers: Xenopus laevis; oncogenes; mos gene; homology; transformation; fibroblasts; induction; maturation; oocytes; mos super(xe); mice; mos

Subj Catg: 07374, GENERAL; 26140, Mos oncogene

32/8/6 (Item 1 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0007972059 CAB Accession Number: 20001422836

Recent advances in use of the ideal protein concept for swine feed formulation.

Publication Year: 2000

Descriptors: body weight; diets; essential amino acids; feed formulation; feed intake; lysine; sulfur amino acids; threonine; tryptophan; reviews; amino acids; protein value; nutrient requirements

CAS Registry Numbers: 56-87-1; 72-19-5; 73-22-3

Organism Descriptors: pigs

Broader Terms: Sus scrofa; Sus; Suidae; Suiformes; Artiodactyla; mammals; vertebrates; Chordata; animals; ungulates

CABICodes: Animal Nutrition (General) (LL500); Feed Composition and Quality (RR300)

32/8/7 (Item 2 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0007388106 CAB Accession Number: 19970307641

Purification of glucoamylase from Lactobacillus amylovorus ATCC 33621.

Publication Year: 1997

Descriptors: purification; gel filtration chromatography; starch; enzyme activity; properties; amino acids; temperature; pH

Identifiers: glucan 1,4-alpha-glucosidase; Lactobacillus amylovorus

CAS Registry Numbers: 9005-25-8

Organism Descriptors: Lactobacillus

Broader Terms: Lactobacillaceae; Firmicutes; bacteria; prokaryotes

CABICodes: Biotechnology (General), (Revised June 2002) (ww000); Chemistry, (Discontinued March 2000) (zz600); Physical Sciences (General) (zz500)

>>>W: "FREE" is not a valid format name in file(s): 399

? d s

Set	Items	Description
S1	38	SELECT AU=PARK, YOUNG
S2	0	SELECT AU=LEE, BYOUNG
S3	277	SELECT AU=LEE, B
S4	0	S S3 AND THREONINE
S5	6	S S3 AND INACTIV?
S6	5	SELECT AU=KIM, DAE

authorsearch1.txt

```

S7      83    SELECT AU=LEE, JIN
S8      2     SELECT AU=CHO, JAE
S9      0     S S1 AND THREONINE
S10     199   SELECT AU=PARK, Y
S11     0     S S10 AND THREONINE
S12     0     S S10 AND INACTIV
S13     0     S S10 AND PCKA
S14     0     S S1 AND PCKA
S15     20541 SELECT AU=PARK, Y?
S16     18    S S15 AND THREONINE
S17     19035 SELECT AU=LEE, B?
S18     19    S S17 AND THREONINE
S19     0     S S6 AND THREONINE
S20     32702 SELECT AU=KIM, D?
S21     39    S S20 AND THREONINE
S22     0     S S7 AND THREONINE
S23     67146 SELECT AU=LEE, J?
S24     87    S S23 AND THREONINE
S25     0     S S8 AND THREONINE
S26     7595  SELECT AU=CHO, J?
S27     17    S S26 AND THREONINE
S28     920723 S S24 AND INACTIVAT? OR DELET? OR ATTENUT?
S29     18    S S16
S30     17    RD (unique items)
S31     19    S S18
S32     16    RD (unique items)
S33     39    S S21
S34     35    RD (unique items)
S35     87    S S24
S36     75    RD (unique items)
S37     17    S S27
S38     16    RD (unique items)

```

? t s34/free/1-35

>>>W: "FREE" is not a valid format name in file(s): 399

34/8/1 (Item 1 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002681223 IP Accession No: 6073607

Identification of antigenic proteins from *Neospora caninum* recognized by bovine immunoglobulins M, E, A and G using immunoproteomics

Publication Date: 2004

Descriptors: Immunoglobulins; Hsp70 protein; Actin; Tubulin; Ribosomal proteins; Pyruvate kinase; Spectrometry; 14-3-3 protein; Vaccines; L-Lactate dehydrogenase; Gel electrophoresis; tachyzoites; *Neospora caninum*
 Subj Catg: 03086, Immunology & vaccination

34/8/2 (Item 2 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002671213 IP Accession No: 6149777

Cloning and expression of a fat body-specific chitinase cDNA from the spider, *Araneus ventricosus*

Publication Date: 2005

Descriptors: Chitinase; Nucleotide sequence; Open reading frames; Chitin; Tunicamycin; Fat body; *Araneus ventricosus*
 Identifiers: cDNA; amino acid sequence predictions
 Subj Catg: 07366, Insects/arachnids; 05216, Biochemical genetics

34/8/3 (Item 3 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002584058 IP Accession No: 5944678

Deletion of a hypoviral-regulated ccppk1 gene in a chestnut blight fungus, *Cryphonectria parasitica*, results in microcolonies

Publication Date: 2004

Descriptors: Blight; Protein-serine/threonine kinase; Gene regulation; Heterokaryons; Spores; Hyphae; Pigmentation; Cell walls; Plant diseases; *Cryphonectria parasitica*; Hypovirus

Identifiers: ccppk1 gene; chestnut blight fungus

Subj Catg: 07330, Fungal genetics; 03079, Fungi

34/8/4 (Item 4 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002417933 IP Accession No: 5415106

Calpain-dependent cleavage of cain/cabin1 activates calcineurin to mediate calcium-triggered cell death

Publication Date: 2002

Descriptors: Calpain; Calcineurin; Calcium; Cell death; Cain protein

Subj Catg: 20029, Enzymes

34/8/5 (Item 5 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002356972 IP Accession No: 5442921

Characterization of a fungal protein kinase from *Cryphonectria parasitica* and its transcriptional upregulation by hypovirus

Publication Date: 2002

Descriptors: Plant diseases; Sterility; Conidia; Protein kinase; Gene regulation; Blight; Nucleotide sequence; Protein-serine/threonine kinase; ccppk1 gene; ptk1 gene; Mf2/1 gene; Mf2/2 gene; *Cryphonectria parasitica*; Hypovirus; *Escherichia coli*

Identifiers: cDNA; amino acid sequence prediction

Subj Catg: 07330, Fungal genetics; 03079, Fungi

34/8/6 (Item 6 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002208642 IP Accession No: 5115181

Drosophila phosphoinositide-dependent kinase-1 regulates apoptosis and growth via the phosphoinositide 3-kinase-dependent signaling pathway

Publication Date: 2001

Descriptors: Enzymatic activity; Apoptosis; Mutants; Gene expression; Phenotypes; phosphoinositide-dependent kinase-1; *Drosophila*

Identifiers: Diptera

Subj Catg: 05187, Embryology

34/8/7 (Item 7 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002206848 IP Accession No: 5110842

Promoter methylation of DAP-kinase: association with advanced stage in non-small cell lung cancer

Publication Date: 2001

Descriptors: Demography; Tobacco; Asbestos; Promoters; Methylation; Lung cancer; DAP-kinase; death-associated protein kinase; DNA methylation; Protein-serine/threonine kinase; DAP protein; lung carcinoma; death associated protein kinase

Identifiers: clinical factors; man

Subj Catg: 14555, Miscellaneous; 26170, Other oncogenes & GF's with serine-threonine kinase activity

34/8/8 (Item 8 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002195281 IP Accession No: 4871197

SPIN90 (SH3 Protein Interacting with Nck, 90 kDa), an Adaptor Protein That Is Developmentally Regulated during Cardiac Myocyte Differentiation

Publication Date: 2001

Descriptors: Developmental genetics; Cell fate; Pattern formation; Differentiation; Nucleotide sequence; Sarcomeres; SPIN90 protein; Fyn protein; Yes protein; c-Src protein; Nck protein

Identifiers: man; cDNA; amino acid sequence prediction

Subj Catg: 07430, Chromosome studies/nucleotide sequence; 14640, Structure & sequence

34/8/9 (Item 9 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002163479 IP Accession No: 4797695

Inhibition of Akt and Its Anti-apoptotic Activities by Tumor Necrosis Factor-induced Protein Kinase C-related Kinase 2 (PRK2) Cleavage

Publication Date: 2000

Descriptors: Apoptosis; Tumor necrosis factor; protein cleavage; Akt protein; PRK2 protein

Subj Catg: 26245, Apoptosis/Bcl-2

34/8/10 (Item 10 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002152583 IP Accession No: 4770610

Purification, characterization, and primary structure of a chitinase from *Pseudomonas* sp. YHS-A2

Publication Date: 2000

Descriptors: Chitinase; ChiA protein; *Pseudomonas*

Identifiers: purification; characterization; plasmid pUC19

Subj Catg: 01006, Enzymes & cofactors; 32310, Enzymes and cofactors

34/8/11 (Item 11 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002101629 IP Accession No: 4732225

The inhibition of ERK/MAPK not the activation of JNK/SAPK is primarily required to induce apoptosis in chronic myelogenous leukemic K562 cells

Publication Date: 2000

Descriptors: Apoptosis; Chronic myeloid leukemia; ERK protein; mitogen-activated protein kinase; JNK protein; SAPK protein

Subj Catg: 26170, Other oncogenes & GF's with serine-threonine kinase activity

34/8/12 (Item 12 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002014724 IP Accession No: 4610799

Cloning and characterization of a nuclear S6 kinase, S6 kinase-related kinase (SRK); A novel nuclear target of Akt

Publication Date: 1999

Descriptors: 1-Phosphatidylinositol 3-kinase; Akt gene; SRK gene; S6 kinase-related kinase; p70 protein; wortmannin; rapamycin; Ribosomal protein S6 kinases

Identifiers: cloning; nucleotide sequence; amino acid sequence prediction

Subj Catg: 14640, Structure & sequence; 07381, General; 26170, Other oncogenes & GF's with serine-threonine kinase activity

34/8/13 (Item 13 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0001624940 IP Accession No: 3923294

A transcription map of the DiGeorge and velo-cardio-facial syndrome minimal critical region on 22q11

Publication Date: 1996

Descriptors: thymic hypoplasia; man

Identifiers: velo-cardio-facial syndrome; chromosome 22; DGCR2/IDD/LAN gene;

protein-serine/threonine kinase; tricarboxylate transporter; clathrin

Subj Catg: 07430, Chromosome studies/nucleotide sequence

34/8/14 (Item 14 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0001468548 IP Accession No: 3712733

Heat shock protein hsp70 accelerates the recovery of heat-shocked mammalian cells through its modulation of heat shock transcription factor HSF1

Publication Date: 1995

Descriptors: gene regulation; heat shock; mammalian cells

Identifiers: HSF1 protein; heat shock factor; Hsp70 protein; rats

Subj Catg: 14930, Transcription factors

34/8/15 (Item 1 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0008934292 CAB Accession Number: 20053223568

Comparison of proteome and antigenic proteome between two Neospora caninum isolates.

Publication Year: 2005

Descriptors: actin; antigens; fructose-bisphosphate aldolase; heat shock proteins; IgG; immune response; isoelectric point; isomerases; lactate dehydrogenase; molecular weight; phosphoric monoester hydrolases; proteins; pyruvate kinase; serine proteinases; tachyzoites; tubulin
Identifiers: enolase; microneme; nucleoside triphosphatase; proteome; proteomics
CAS Registry Numbers: 9024-52-6; 9001-60-9; 9001-59-6
Organism Descriptors: dogs; *Neospora caninum*
Broader Terms: *Canis*; *Canidae*; *Fissipeda*; *carnivores*; *mammals*; *vertebrates*; *Chordata*; *animals*; *small mammals*; *Neospora*; *Sarcocystidae*; *Eucoccidiorida*; *Apicomplexa*; *Protozoa*; *invertebrates*
CABICodes: *Protozoan*, *Helminth*, *Mollusc and Arthropod Parasites of Animals*, (New March 2000) (LL822); *Biochemistry and Physiology of Microorganisms*, (New March 2000) (ZZ394); *Genetics and Molecular Biology of Microorganisms*, (New March 2000) (ZZ395)

34/8/16 (Item 2 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0008347980 CAB Accession Number: 20033004060

A phytochrome-associated protein phosphatase 2A modulates light signals in flowering time control in *Arabidopsis*.

Publication Year: 2002

Descriptors: far red light; flowering; gene expression; genes; light; light relations; photoperiod; photoperiodism; photoreceptors; phytochrome; red light; transgenic plants

Identifiers: serine/threonine specific protein phosphatase

Organism Descriptors: *Arabidopsis thaliana*; plants

Broader Terms: *Arabidopsis*; *Brassicaceae*; *Capparidales*; *dicotyledons*; *angiosperms*; *Spermatophyta*; plants

CABICodes: *Plant Breeding and Genetics* (FF020); *Plant Physiology and Biochemistry* (FF060); *Genetic Engineering, Gene Transfer and Transgenics*, (New June 2002) (ww100)

34/8/17 (Item 3 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0008302827 CAB Accession Number: 20023154899

Calcineurin, a calcium/calmodulin-dependent protein phosphatase, is involved in movement, fertility, egg laying, and growth in *Caenorhabditis elegans*.

Publication Year: 2002

Descriptors: enzymes; fertility; free living nematodes; gene expression; genes; growth; movement; mutants; mutations; pleiotropy; signal transduction; spermatheca; spermatozoa; vulva

Identifiers: serine/threonine specific protein phosphatase

Organism Descriptors: *Caenorhabditis elegans*

Broader Terms: *Caenorhabditis*; *Rhabditidae*; *Nematoda*; *invertebrates*; *animals*

CABICodes: *Soil Biology* (JJ100); *Reproduction, Development and Life Cycle (Wild Animals)*, (New March 2000) (YY200); *Genetics and Molecular Genetics (Wild Animals)*, (New March 2000) (YY300); *Physiology and Biochemistry (Wild Animals)*, (New March 2000) (YY400)

34/8/18 (Item 4 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0007818023 CAB Accession Number: 20000402489

Fermentation of goat milk using *Lactobacillus plantarum* and *Candida kefir* isolated from Mongolian koumiss.

Publication Year: 1999

Descriptors: goat milk; milk; essential amino acids; ethanol; fermentation; cultured milks; lactose; total solids; lactic acid bacteria; minerals; milk products; viscosity; yoghurt; physicochemical properties; koumiss; sensory evaluation; organoleptic traits

Identifiers: taste panels

CAS Registry Numbers: 64-17-5; 62-42-3

Organism Descriptors: *Lactobacillus delbrueckii* subsp. *bulgaricus*; yeasts;

Lactobacillus plantarum; *Candida kefir*

Geographic Names: Korea Republic

Broader Terms: *Lactobacillus delbrueckii*; *Lactobacillus*; *Lactobacillaceae*;

Firmicutes; bacteria; prokaryotes; Eumycota; fungi; *Candida*; Deuteromycotina; East

Asia; Asia; Developing Countries; Threshold Countries; OECD Countries

CABICodes: Milk and Dairy Produce (QQ010); Food Composition and Quality (QQ500);

Microbial Technology in Food Processing (QQ120)

34/8/19 (Item 1 from file: 143) Links

Biol. & Agric. Index

(c) 2006 The HW Wilson Co. All rights reserved.

1903128 H.W. Wilson Record Number: BBAl05166273

Molecular Cloning and Characterization of the Human AKT1 Promoter Uncovers Its Up-regulation by the Src/Stat3 Pathway

Descriptors: Serine-threonine kinase; Molecular cloning; Apoptosis--Inhibition
20051125

34/8/20 (Item 2 from file: 143) Links

Biol. & Agric. Index

(c) 2006 The HW Wilson Co. All rights reserved.

1800130 H.W. Wilson Record Number: BBAl03138980

Regulation of the Phosphatidylinositol 3-Kinase, Akt/Protein Kinase B, FRAP/Mammalian Target of Rapamycin, and Ribosomal S6 Kinase 1 Signaling Pathways by Thyroid-stimulating Hormone (TSH) and Stimulating type TSH Receptor Antibodies in the Thyroid Gland

Descriptors: Serine-threonine kinase--Regulation; Signal transduction; Thyrotropin; Thyroid gland--Drug effects; mTOR protein
20030613

34/8/21 (Item 3 from file: 143) Links

Biol. & Agric. Index

(c) 2006 The HW Wilson Co. All rights reserved.

1548470 H.W. Wilson Record Number: BBAl01052315

Akt/PKB promotes cancer cell invasion via increased motility and metalloproteinase production

Descriptors: Metalloproteinases; Cells--Motility; Metastasis; Serine-threonine kinase
20010900

34/8/22 (Item 4 from file: 143) Links

Biol. & Agric. Index

(c) 2006 The HW Wilson Co. All rights reserved.

1548013 H.W. Wilson Record Number: BBAl01025205

Cyclic AMP inhibits Akt activity by blocking the membrane localization of PDK1

Descriptors: Adenosine monophosphate; Serine-threonine kinase--Regulation;
Phosphatidylinositol kinase
20010420

34/8/23 (Item 1 from file: 393) Links

Title: Increase of the Protease Activity of Aqualysis I, a Thermostable Serine
Protease, by Replacing Asn219 near the Catalytic Residue Ser222
Pub. Year: 1997

>>>W: "FREE" is not a valid format name in file(s): 399

? d s

Set	Items	Description
S1	38	SELECT AU=PARK, YOUNG
S2	0	SELECT AU=LEE, BYOUNG
S3	277	SELECT AU=LEE, B
S4	0	S S3 AND THREONINE
S5	6	S S3 AND INACTIV?
S6	5	SELECT AU=KIM, DAE
S7	83	SELECT AU=LEE, JIN
S8	2	SELECT AU=CHO, JAE
S9	0	S S1 AND THREONINE
S10	199	SELECT AU=PARK, Y
S11	0	S S10 AND THREONINE
S12	0	S S10 AND INACTIV
S13	0	S S10 AND PCKA
S14	0	S S1 AND PCKA
S15	20541	SELECT AU=PARK, Y?
S16	18	S S15 AND THREONINE
S17	19035	SELECT AU=LEE, B?
S18	19	S S17 AND THREONINE
S19	0	S S6 AND THREONINE
S20	32702	SELECT AU=KIM, D?
S21	39	S S20 AND THREONINE
S22	0	S S7 AND THREONINE
S23	67146	SELECT AU=LEE, J?
S24	87	S S23 AND THREONINE
S25	0	S S8 AND THREONINE
S26	7595	SELECT AU=CHO, J?
S27	17	S S26 AND THREONINE
S28	920723	S S24 AND INACTIVAT? OR DELET? OR ATTENUT?
S29	18	S S16
S30	17	RD (unique items)
S31	19	S S18
S32	16	RD (unique items)
S33	39	S S21
S34	35	RD (unique items)
S35	87	S S24
S36	75	RD (unique items)
S37	17	S S27
S38	16	RD (unique items)

? t s36/free/1-75

>>>W: "FREE" is not a valid format name in file(s): 399

36/8/1 (Item 1 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002846300 IP Accession No: 6747651

authorsearch1.txt

Protein Kinase-mediated Regulation of Calcineurin through the Phosphorylation of
Modulatory Calcineurin-interacting Protein 1

Publication Date: 2006

Descriptors: BMK1 protein; Calcineurin; Phosphorylation; DSCR1 protein; NF-AT
protein; Signal transduction; MAP kinase; Angiotensin; Lymphocytes T;
cardiomyocytes; protein phosphatase; Protein kinase; Angiotensin II; Myocytes;
Protein interaction; Differentiation; 14-3-3 protein; Hypertrophy;
Protein-serine/threonine-phosphatase
Identifiers: mice; MEKK3 protein; MEK5 protein
Subj Catg: 07397, Rodentia (mice)

36/8/2 (Item 2 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002842601 IP Accession No: 6152798

Double-stranded RNA-activated protein kinase is required for the LPS-induced
activation of STAT1 inflammatory signaling in rat brain glial cells

Publication Date: 2005

Descriptors: Stat1 protein; eIF-2 kinase; Phosphorylation; Signal transduction;
siRNA; Glial cells; Central nervous system; Gene regulation; Stress; NF- Kappa B
protein; beta -Interferon; Protein-serine/threonine kinase; Astrocytes
Identifiers: rats
Subj Catg: 11073, Glial cell biology and metabolism

36/8/3 (Item 3 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002819580 IP Accession No: 6758481

The JAK2 V617F mutation in de novo acute myelogenous leukemias

Publication Date: 2006

Descriptors: Janus kinase 2; Missense mutation; Acute myeloid leukemia; Malignancy;
Colon; Myeloproliferative diseases; Myelofibrosis; Signal transduction; Breast
cancer; Myeloid metaplasia; Polycythemia vera; Single strand conformation
polymorphism
Subj Catg: 26170, Other oncogenes & GF's with serine-threonine kinase activity

36/8/4 (Item 4 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002797578 IP Accession No: 6527127

Big Mitogen-Activated Protein Kinase 1/Extracellular Signal-Regulated Kinase 5
Signaling Pathway Is Essential for Tumor-Associated Angiogenesis

Publication Date: 2005

Descriptors: Angiogenesis; Endothelial cells; Phosphorylation; vascularization; MAP
kinase; Signal transduction; Vascular system; Extracellular signal-regulated kinase;
Cell survival; Blood vessels; Ribosomal protein S6 kinase; Embryos; Xenografts;
ribosomal protein S6; Transgenic mice; Gene deletion; Cell proliferation; ribosomal
S6 kinase; BMK1 protein; Adenovirus
Subj Catg: 14010, Physical & Computer Methods & Assays; 26170, Other oncogenes &
GF's with serine-threonine kinase activity

36/8/5 (Item 5 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002778037 IP Accession No: 6549141

Regulatory analysis of amino acid synthesis pathway in Escherichia coli: aspartate family

Publication Date: 2004

Descriptors: Amino acids; Lysine; Threonine; Metabolism; Isoleucine; Protein synthesis; Enzymes; Asparagine; Reaction mechanisms; Methionine; Escherichia coli
Subj Catg: 02727, Amino acids, peptides and proteins

36/8/6 (Item 6 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002728426 IP Accession No: 6414824

Transcriptional Activity of Sp1 Is Regulated by Molecular Interactions between the Zinc Finger DNA Binding Domain and the Inhibitory Domain with Corepressors, and This Interaction Is Modulated by MEK

Publication Date: 2005

Descriptors: Sp1 protein; Promoters; Repressors; Zinc finger proteins; DNA; DNA-binding protein; SMRT protein; Enhancers; Serine; Extracellular signal-regulated kinase; Transcription factors; Gene fusion; MAP kinase; Molecular modelling; Protein interaction; Fusion protein
Subj Catg: 14085, DNA: Transcription factors, repressors, nucleoproteins & DNA-binding proteins

36/8/7 (Item 7 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002725779 IP Accession No: 6396417

Erk phosphorylates threonine 42 residue of ribosomal protein S3

Publication Date: 2005

Descriptors: Extracellular signal-regulated kinase; ribosomal protein S3; Evolution; MAP kinase; Threonine; Ribosomes; Differentiation; DNA; DNA repair; Apoptosis
Subj Catg: 14030, DNA: biosynthesis, repair & replication cycle

36/8/8 (Item 8 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002652563 IP Accession No: 6170695

A Single Nucleotide Polymorphism on the Promoter of eotaxin1 Associates with Its mRNA Expression and Asthma Phenotypes

Publication Date: 2005

Descriptors: Single-nucleotide polymorphism; Asthma; methacholine; Promoters; Immunoglobulin E; Tumor necrosis factor- alpha ; Gene polymorphism; Threonine; Inflammation; Alanine; Peripheral blood
Subj Catg: 06846, Clinical

36/8/9 (Item 9 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

authorsearch1.txt

0002641135 IP Accession No: 6090781

Proteomic response analysis of a threonine-overproducing mutant of Escherichia coli

Publication Date: 2004

Descriptors: Threonine; Malate dehydrogenase; Citrate (si)-synthase; oxaloacetic acid; Aspartate ammonia-lyase; Aspartic acid; L- Threonine 3-dehydrogenase; Cystathionine beta -lyase; Escherichia coli

Identifiers: homoserine

Subj Catg: 07320, Bacterial genetics; 02727, Amino acids, peptides and proteins

36/8/10 (Item 10 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002623308 IP Accession No: 5932554

Activation of cyclin-dependent kinase 5 is involved in axonal regeneration

Publication Date: 2004

Descriptors: Cyclin-dependent kinase 5; Regeneration; Motor neurons; Growth cones; Protein-serine/threonine kinase; Axonogenesis; Peripheral nerves; p35 protein

Subj Catg: 11057, Neural transplantation and regeneration

36/8/11 (Item 11 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002586013 IP Accession No: 5801667

Regulation of the Dual Specificity Protein Phosphatase, DsPTP1, through Interactions with Calmodulin

Publication Date: 2004

Descriptors: Phosphorylation; Calmodulin; Plants; Phosphoprotein phosphatase; Signal transduction; Calcium-binding protein; Calcium signalling; Dephosphorylation; phosphotyrosine; p-nitrophenyl phosphate; Protein kinase; Threonine; Site-directed mutagenesis; Arabidopsis

Subj Catg: 20060, Plants

36/8/12 (Item 12 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002539697 IP Accession No: 5837742

Biochemical Characterization of the Drosophila wingless Signaling Pathway Based on RNA Interference

Publication Date: 2004

Descriptors: Phosphorylation; Intracellular signalling; RNA-mediated interference; casein kinase I alpha ; wingless protein; Armadillo protein; Zeste-white protein; Daxin; Drosophila

Subj Catg: 14560, Antisense research

36/8/13 (Item 13 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002517117 IP Accession No: 5758226

Phosphorylated Claspins Interacts with a Phosphate-binding Site in the Kinase Domain of Chk1 during ATR-mediated Activation

Publication Date: 2003

Descriptors: Site-directed mutagenesis; DNA damage; Phosphorylation; Chk1 protein; ATR protein; Claspin; Xenopus
Identifiers: Clawed frogs
Subj Catg: 14681, Mutagenesis techniques

36/8/14 (Item 14 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002504683 IP Accession No: 5701593

Global Analyses of Transcriptomes and Proteomes of a Parent Strain and an L-Threonine-Overproducing Mutant Strain

Publication Date: 2003

Descriptors: Nucleotide sequence; Gene regulation; Threonine; Ribosomal proteins; transcriptomes; proteomes; aceA gene; aceB gene; gltA gene; icdA gene; glnA gene; leu gene; yigJ gene; yfiD gene; hdeB gene; hdeA gene; oppA gene; thrA gene; proA gene; thrC gene; dadA gene; dadX gene; ompF gene; oppB gene; oppF gene; thrA345 gene; lva97 gene; thrB gene; Escherichia coli
Subj Catg: 07320, Bacterial genetics; 02740, Genetics and evolution

36/8/15 (Item 15 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002476214 IP Accession No: 5622167

Involvement of PI3K/Akt pathway in cell cycle progression, apoptosis, and neoplastic transformation: a target for cancer chemotherapy

Publication Date: 2003

Descriptors: 1-Phosphatidylinositol 3-kinase; Cell cycle; Cancer; Chemotherapy; Transformation; Signal transduction; Cyclins; Cyclin-dependent kinase; Cell proliferation; Akt protein
Subj Catg: 26170, Other oncogenes & GF's with serine-threonine kinase activity

36/8/16 (Item 16 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002428209 IP Accession No: 5493823

PKB/Akt phosphorylates p27, impairs nuclear import of p27 and opposes p27-mediated G1 arrest

Publication Date: 2002

Descriptors: Phosphorylation; Breast carcinoma; G1 phase; Akt gene; Kit1 gene; p27 protein
Identifiers: man
Subj Catg: 26242, Cyclins and cyclin-dependent kinases

36/8/17 (Item 17 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002341107 IP Accession No: 5386836

The Raf/MEK/ERK signal transduction cascade as a target for chemotherapeutic intervention in leukemia

Publication Date: 2002

authorsearch1.txt

Descriptors: Reviews; Signal transduction; Chemotherapy; Gene targeting; Leukemia;
Raf protein; MEK protein; ERK protein
Identifiers: man
Subj Catg: 26170, Other oncogenes & GF's with serine-threonine kinase activity

36/8/18 (Item 18 from file: 24) Links
CSA Life Sciences Abstracts
(c) 2006 CSA. All rights reserved.
0002306266 IP Accession No: 5348375
Casein kinase I phosphorylates the Armadillo protein and induces its degradation in
Drosophila

Publication Date: 2002

Descriptors: Overexpression; Embryos; Cuticles; Gene disruption; Degradation;
Phosphorylation; casein kinase I; Armadillo protein; Gene expression; *Drosophila*
Subj Catg: 07250, Developmental genetics; 05187, Embryology

36/8/19 (Item 19 from file: 24) Links
CSA Life Sciences Abstracts
(c) 2006 CSA. All rights reserved.
0002281744 IP Accession No: 5298038
Structural and Functional Role of Threonine 112 in a Superantigen *Staphylococcus*
aureus Enterotoxin B

Publication Date: 2002

Descriptors: Threonine; Superantigens; Enterotoxins; staphylococcal enterotoxin B;
Staphylococcus aureus
Identifiers: mutants
Subj Catg: 02822, Biosynthesis and physicochemical properties; 01023, Others; 24171,
Microbial

36/8/20 (Item 20 from file: 24) Links
CSA Life Sciences Abstracts
(c) 2006 CSA. All rights reserved.
0002262626 IP Accession No: 5281867
Regulation of pancreatic beta -cell growth and survival by the serine/ threonine
protein kinase Akt1/PKB alpha

Publication Date: 2001

Descriptors: Lymphocytes B; Pancreas; Proliferation; Insulin; Glucose tolerance;
Signal transduction; Diabetes mellitus; Akt1 protein; PKBa protein; *Drosophila*
melanogaster; Mammalia
Identifiers: Mammals
Subj Catg: 07250, Developmental genetics

36/8/21 (Item 21 from file: 24) Links
CSA Life Sciences Abstracts
(c) 2006 CSA. All rights reserved.
0002208642 IP Accession No: 5115181
Drosophila phosphoinositide-dependent kinase-1 regulates apoptosis and growth via
the phosphoinositide 3-kinase-dependent signaling pathway

Publication Date: 2001

Descriptors: Enzymatic activity; Apoptosis; Mutants; Gene expression; Phenotypes;
Page 30

phosphoinositide-dependent kinase-1; Drosophila
Identifiers: Diptera
Subj Catg: 05187, Embryology

36/8/22 (Item 22 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002187441 IP Accession No: 4857371

BMK1 Mediates Growth Factor-induced Cell Proliferation through Direct Cellular Activation of Serum and Glucocorticoid-inducible Kinase

Publication Date: 2001

Descriptors: Cell proliferation; Glucocorticoids; Phosphorylation; BMK1 protein; mitogen-activated protein kinase

Subj Catg: 26170, Other oncogenes & GF's with serine-threonine kinase activity

36/8/23 (Item 23 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002181480 IP Accession No: 4846159

A Novel Mitogen-Activated Protein Kinase Is Responsive to Raf and Mediates Growth Factor Specificity

Publication Date: 2001

Descriptors: Fibroblast growth factor; Epidermal growth factor; Phosphorylation; Transcription factors; mitogen-activated protein kinase; Raf gene; p97 protein

Subj Catg: 26170, Other oncogenes & GF's with serine-threonine kinase activity; 14940, Nucleic acid-binding proteins

36/8/24 (Item 24 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002165523 IP Accession No: 4800667

Ptc1, a Type 2C Ser/Thr Phosphatase, Inactivates the HOG Pathway by Dephosphorylating the Mitogen-Activated Protein Kinase Hog1

Publication Date: 2001

Descriptors: Gene regulation; MAP kinase; Protein-serine/threonine-phosphatase; Osmotic stress; Hog1 protein; Ptc1 protein; PTC3 gene; PTC2 gene; Saccharomyces cerevisiae

Identifiers: budding yeast

Subj Catg: 14662, Gene regulation; 03015, Fungi

36/8/25 (Item 25 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0001964239 IP Accession No: 4497712

Frequent Somatic Mutations in Serine/Threonine Kinase 11/Peutz-Jeghers Syndrome Gene in Left-sided Colon Cancer

Publication Date: 1998

Descriptors: Protein-serine/threonine kinase; Colorectal carcinoma; Loss of heterozygosity; Tumor suppressor genes; STK11 gene; Peutz-Jeghers syndrome

Identifiers: nucleotide sequence; frameshift mutant; missense mutant; man
Subj Catg: 07471, General

36/8/26 (Item 26 from file: 24) Links
CSA Life Sciences Abstracts
(c) 2006 CSA. All rights reserved.
0001908311 IP Accession No: 4404111
Truncation Mutations in the Transactivation Region of PAX6 Result in
Dominant-Negative Mutants

Publication Date: 1998

Descriptors: Transcription factors; Eye lens; PAX-6 protein; aniridia
Identifiers: man
Subj Catg: 14930, Transcription factors

36/8/27 (Item 27 from file: 24) Links
CSA Life Sciences Abstracts
(c) 2006 CSA. All rights reserved.
0001888710 IP Accession No: 4389186
Prostaglandin E sub(2) increases proenkephalin mRNA level in rat astrocyte-enriched
culture

Descriptors: proenkephalin; Prostaglandin E2; Astrocytes; Protein kinase A
Identifiers: rats; mRNA
Subj Catg: 11075, Molecular neurobiology

36/8/28 (Item 28 from file: 24) Links
CSA Life Sciences Abstracts
(c) 2006 CSA. All rights reserved.
0001876809 IP Accession No: 4358479
The Negative Dominant Effects of T340M Mutation on Mammalian Pyruvate Kinase

Publication Date: 1998

Descriptors: Pyruvate kinase; phosphoenolpyruvate
Identifiers: rabbits
Subj Catg: 07393, Lagomorpha

36/8/29 (Item 29 from file: 24) Links
CSA Life Sciences Abstracts
(c) 2006 CSA. All rights reserved.
0001666414 IP Accession No: 3980001
Characterization of carbohydrate-peptide linkage of acidic heteroglycopeptide with
immuno-stimulating activity from mycelium of Phellinus linteus

Publication Date: 1996

Descriptors: carbohydrates; peptides; glycoproteins; immunostimulation; mycelia;
Phellinus linteus
Identifiers: serine; threonine; alanine
Subj Catg: 03025, Fungi

36/8/30 (Item 30 from file: 24) Links
CSA Life Sciences Abstracts
(c) 2006 CSA. All rights reserved.
0001621046 IP Accession No: 3918370
A specific protein carboxyl methyltransferase that demethylates phosphoprotein
phosphatase 2A in bovine brain

Publication Date: 1996

Descriptors: brain; methylation

Identifiers: cattle; serine/threonine phosphatase; phosphoprotein phosphatase 2A; okadaic acid; methyltransferase; methyltransferase

Subj Catg: 11075, Molecular neurobiology

36/8/31 (Item 31 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0001609610 IP Accession No: 3902661

Regulation of A-raf expression

Publication Date: 1996

Descriptors: steroid hormones; transcription; man; HeLa cells; promoters; gene expression

Identifiers: A-raf gene; glucocorticoid receptors

Subj Catg: 26150, Raf/Mit/Pks oncogenes; 26400, HUMAN-RELATED ONCOGENES AND GROWTH FACTORS; CROSS REFERENCES

36/8/32 (Item 32 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0001602637 IP Accession No: 3892486

A Drosophila homolog of the Rac- and Cdc42-activated serine/ threonine kinase is a potential focal adhesion and focal complex protein that colocalizes with dynamic actin structures

Publication Date: 1996

Descriptors: cytoskeleton; Drosophila melanogaster

Identifiers: DPAK protein; Rac protein; Cdc42 protein; actin

Subj Catg: 14640, Structure & sequence; 05213, Genes & molecular genetics

36/8/33 (Item 33 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0001599742 IP Accession No: 3888341

LET-23-mediated signal transduction during Caenorhabditis elegans development

Publication Date: 1995

Descriptors: developmental genetics; signal transduction; vulva; Caenorhabditis elegans

Identifiers: protein-tyrosine kinase receptors; LET-23 protein; epidermal growth factor receptors

Subj Catg: 07250, Developmental genetics

36/8/34 (Item 34 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0001592704 IP Accession No: 3878549

Identification of mitogen-activated protein (MAP) kinase-activated protein kinase-3, a novel substrate of CSBP p38 MAP kinase

Publication Date: 1996

authorsearch1.txt

Descriptors: man; nucleotide sequence
Identifiers: CSBP protein; MAP kinase; MAPKAP kinase 3; amino acid sequence
prediction; p38 protein
Subj Catg: 14640, Structure & sequence; 07430, Chromosome studies/nucleotide
sequence; 26170, Other oncogenes & GF's with serine-threonine kinase activity

36/8/35 (Item 35 from file: 24) Links
CSA Life Sciences Abstracts
(c) 2006 CSA. All rights reserved.
0001589684 IP Accession No: 3874031
Role for p38 mitogen-activated protein kinase in platelet aggregation caused by
collagen or a thromboxane analogue

Publication Date: 1996

Descriptors: platelets; man
Identifiers: mitogen-activated protein kinase; collagen; thromboxane
Subj Catg: 26170, Other oncogenes & GF's with serine-threonine kinase activity;
06757, NK cells

36/8/36 (Item 36 from file: 24) Links
CSA Life Sciences Abstracts
(c) 2006 CSA. All rights reserved.
0001579480 IP Accession No: 3860861
Characterization of the structure and function of a novel MAP kinase kinase (MKK6)

Publication Date: 1996

Descriptors: man; amino acid composition; DNA; cloning
Identifiers: MKK6 protein; mitogen-activated protein kinase
Subj Catg: 26170, Other oncogenes & GF's with serine-threonine kinase activity;
26400, HUMAN-RELATED ONCOGENES AND GROWTH FACTORS: CROSS REFERENCES

36/8/37 (Item 37 from file: 24) Links
CSA Life Sciences Abstracts
(c) 2006 CSA. All rights reserved.
0001578137 IP Accession No: 3858879
Inhibitors of serine/threonine kinases

Publication Date: 1995

Descriptors: inhibitors; probes; signal transduction
Identifiers: protein-serine/threonine kinase
Subj Catg: 33310, Enzymes and cofactors

36/8/38 (Item 38 from file: 24) Links
CSA Life Sciences Abstracts
(c) 2006 CSA. All rights reserved.
0001411034 IP Accession No: 3637195
Use of site-directed mutagenesis to define the limits of sequence variation
tolerated for processing of the M13 procoat protein by the Escherichia coli leader
peptidase

Publication Date: 1991

Descriptors: leader sequence; site-directed mutagenesis; amino acid sequence;
Escherichia coli
Identifiers: leader peptidase; M13 procoat protein
Subj Catg: 14681, Mutagenesis techniques; 02727, Amino acids, peptides and proteins

36/8/39 (Item 39 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0001166329 IP Accession No: 2798914

Improved L-lysine production by the amplification of the *Corynebacterium glutamicum* dapA gene encoding dihydrodipicolinate synthetase in *E. coli*.

Publication Date: 1991

Descriptors: gene amplification; cloning; gene expression; overproduction; recombinant; biosynthesis; genes; *Corynebacterium glutamicum*; dihydrodipicolinate synthetase; dapA gene; *Escherichia coli*; lysine; *Corynebacterium glutamicum*; *Escherichia coli*

Identifiers: dihydrodipicolinate synthetase; dapA gene; lysine

Subj Catg: 02740, Genetics and evolution; 30134, Microorganisms; 14684, Expression of cloned genes; 07120, Recombinant DNA/Genetic engineering; 02727, Amino acids, peptides and proteins; 30405, Amino acids

36/8/40 (Item 40 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0001138928 IP Accession No: 2734607

Molecular cloning and expression of s-(2-aminoethyl)-L-cysteine resistant aspartokinase gene of *Corynebacterium glutamicum*.

Publication Date: 1991

Descriptors: genes; cloning; resistance; plasmids; transformation; gene expression; *Corynebacterium glutamicum*; aspartate kinase; s-(2-aminoethyl)-L-cysteine; *Corynebacterium glutamicum*

Identifiers: aspartate kinase; s-(2-aminoethyl)-L-cysteine

Subj Catg: 02740, Genetics and evolution; 14684, Expression of cloned genes; 07320, Bacterial genetics; 30134, Microorganisms; 02728, Enzymes

36/8/41 (Item 41 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0000782466 IP Accession No: 1971045

A protein kinase that phosphorylates the C-terminal repeat domain of the largest subunit of RNA polymerase II.

Publication Date: 1989

Descriptors: DNA-directed RNA polymerase II; *Saccharomyces cerevisiae*; *Saccharomyces cerevisiae*

Identifiers: protein kinase; purification; phosphorylation; DNA-directed RNA polymerase II

Subj Catg: 16120, Proteins from other microorganisms; 03020, Fungi

36/8/42 (Item 42 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0000697896 IP Accession No: 1790994

Immunogenicity and antigenicity of immunoglobulins: Detection of human immunoglobulin light-chain carbohydrate, using concanavalin A.

Publication Date: 1987

authorsearch1.txt

Descriptors: carbohydrates; concanavalin A
Identifiers: light chains; Bence Jones protein; immunoglobulins; concanavalin A
Subj Catg: 16013, OTHER PHYSICOCHEMICAL INVESTIGATIONS; 06039, IgG

36/8/43 (Item 1 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0008909633 CAB Accession Number: 20053182608

Regulation of calcineurin, a calcium/calmodulin-dependent protein phosphatase, in *C. elegans*.

Publication Year: 2004

Descriptors: biological development; calcium; calcium binding proteins; catalytic activity; enzyme activity; enzyme inhibitors; enzymes; free living nematodes; gene expression; genes; growth; locomotion; oviposition; phosphoric monoester hydrolases; reviews

Identifiers: Rhabditida; Secernentea; serine/threonine protein phosphatase 1

CAS Registry Numbers: 7440-70-2

Organism Descriptors: Caenorhabditis elegans

Broader Terms: Caenorhabditis; Rhabditidae; Nematoda; invertebrates; animals

CABICodes: Soil Biology (JJ100); Genetics and Molecular Genetics (Wild Animals), (New March 2000) (YY300); Physiology and Biochemistry (Wild Animals), (New March 2000) (YY400); Molecular Biology and Molecular Genetics, (Discontinued March 2000, Reinstated and Revised June 2002) (ZZ360)

36/8/44 (Item 2 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0008773080 CAB Accession Number: 20053034568

Methionine and threonine synthesis are limited by homoserine availability and not the activity of homoserine kinase in *Arabidopsis thaliana*.

Publication Year: 2005

Descriptors: methionine; promoters; threonine

Identifiers: homoserine kinase

CAS Registry Numbers: 63-68-3; 72-19-5

Organism Descriptors: Arabidopsis thaliana

Broader Terms: Arabidopsis; Brassicaceae; Capparidales; dicotyledons; angiosperms; Spermatophyta; plants

CABICodes: Plant Physiology and Biochemistry (FF060); Weeds and Noxious Plants (FF500)

36/8/45 (Item 3 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0008590193 CAB Accession Number: 20043043380

Effects of phytase and enzyme complex supplementation to diets with different nutrient levels on growth performance and ileal nutrient digestibility of weaned pigs.

Publication Year: 2004

Descriptors: beta-galactosidase; bones; crude protein; digestibility; energy content; enzymes; feed conversion efficiency; feed supplements; galactomannans; growth; ileum; lysine; metabolizable energy; methionine; nutritive value; phosphorus; phytase; threonine; tryptophan

CAS Registry Numbers: 9031-11-2; 56-87-1; 63-68-3; 7723-14-0; 9001-89-2; 37288-11-2; 72-19-5; 73-22-3

authorsearch1.txt

Organism Descriptors: pigs

Broader Terms: Sus scrofa; Sus; Suidae; Suiformes; Artiodactyla; mammals; vertebrates; Chordata; animals; ungulates

CABICodes: Animal Nutrition (General) (LL500); Animal Nutrition (Physiology) (LL510); Animal Nutrition (Production Responses) (LL520)

36/8/46 (Item 4 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0008302827 CAB Accession Number: 20023154899

Calcineurin, a calcium/calmodulin-dependent protein phosphatase, is involved in movement, fertility, egg laying, and growth in *Caenorhabditis elegans*.

Publication Year: 2002

Descriptors: enzymes; fertility; free living nematodes; gene expression; genes; growth; movement; mutants; mutations; pleiotropy; signal transduction; spermatheca; spermatozoa; vulva

Identifiers: serine/threonine specific protein phosphatase

Organism Descriptors: *Caenorhabditis elegans*

Broader Terms: *Caenorhabditis*; Rhabditidae; Nematoda; invertebrates; animals

CABICodes: Soil Biology (JJ100); Reproduction, Development and Life Cycle (Wild Animals), (New March 2000) (YY200); Genetics and Molecular Genetics (Wild Animals), (New March 2000) (YY300); Physiology and Biochemistry (Wild Animals), (New March 2000) (YY400)

36/8/47 (Item 5 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0008037473 CAB Accession Number: 20013070017

Effects of low crude protein diets supplemented with synthetic amino acids on performance, nutrient utilization and carcass characteristics in finishing pigs reared using a phase feeding regimen.

Publication Year: 2001

Descriptors: backfat; carcass composition; carcass grading; carcass quality; carcass weight; dietary protein; diets; digestibility; dry matter; essential amino acids; excretion; fat thickness; feed conversion efficiency; feed intake; feed supplements; liveweight gain; lysine; methionine; nitrogen retention; nonessential amino acids; nutrition physiology; phosphorus; pig feeding; protein supplements; proteins; threonine; tryptophan

CAS Registry Numbers: 56-87-1; 63-68-3; 7723-14-0; 72-19-5; 73-22-3

Organism Descriptors: pigs

Broader Terms: Sus scrofa; Sus; Suidae; Suiformes; Artiodactyla; mammals; vertebrates; Chordata; animals; ungulates

CABICodes: Animal Nutrition (General) (LL500); Animal Nutrition (Physiology) (LL510); Animal Nutrition (Production Responses) (LL520); Meat Produce (QQ030); Food Composition and Quality (QQ500); Feed Composition and Quality (RR300)

36/8/48 (Item 6 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0007995648 CAB Accession Number: 20003029945

Optimal threonine:lysine ratio for growing pigs of different sexes.

Publication Year: 2000

Descriptors: amino acids; digestibility; essential amino acids; feed conversion efficiency; feed intake; gilts; liveweight gain; lysine; nonessential amino acids;

authorsearch1.txt

sex differences; threonine

CAS Registry Numbers: 56-87-1; 72-19-5

Organism Descriptors: pigs

Broader Terms: Sus scrofa; Sus; Suidae; Suiformes; Artiodactyla; mammals; vertebrates; Chordata; animals; ungulates

CABICodes: Animal Nutrition (Physiology) (LL510); Animal Nutrition (Production Responses) (LL520)

36/8/49 (Item 7 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0007939293 CAB Accession Number: 20000406036

Amino acid metabolism by the mammary gland of dairy cows fed fresh pasture.

Publication Year: 2000

Descriptors: cows; dairy cows; mammary glands; metabolism; essential amino acids; milk protein yield; feeding; histidine; lysine; milk protein; phenylalanine; protein synthesis; threonine; tyrosine; uptake; amino acids

CAS Registry Numbers: 71-00-1; 56-87-1; 63-91-2; 72-19-5; 60-18-4

Organism Descriptors: cattle

Broader Terms: Bos; Bovidae; ruminants; Artiodactyla; mammals; vertebrates;

Chordata; animals; ungulates

CABICodes: Dairy Animals (LL110); Animal Nutrition (Production Responses) (LL520); Animal Nutrition (Physiology) (LL510); Animal Physiology and Biochemistry (Excluding Nutrition) (LL600)

36/8/50 (Item 8 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0007921698 CAB Accession Number: 20000710930

CHRK1, a chitinase-related receptor-like kinase in tobacco.

Publication Year: 2000

Descriptors: kinases; tobacco; amino acids; complementary DNA; chitinase; glutamic acid; messenger RNA; pathogens; plasma membranes; enzymes; amino acid sequences; defence mechanisms

CAS Registry Numbers: 9001-06-3; 56-86-0

Organism Descriptors: Nicotiana tabacum; plant viruses; tobacco mosaic tobamovirus; Nicotiana

Broader Terms: Nicotiana; Solanaceae; Solanales; dicotyledons; angiosperms;

Spermatophyta; plants; viruses; plant pathogens; pathogens; tobamovirus group; plant viruses

CABICodes: Field Crops, (New March 2000) (FF005); Plant Physiology and Biochemistry (FF060); Viral, Bacterial and Fungal Diseases of Plants, (New March 2000) (FF610); Host Resistance and Immunity (HH600)

36/8/51 (Item 9 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0007874784 CAB Accession Number: 20001411444

The role of synthetic amino acids in monogastric animal production.

Publication Year: 2000

Descriptors: reviews; nutrition; amino acids; poultry; immune system; animal production; colostrum; diets; excretion; growth rate; health; intestines; milk; piglets; poultry manure; supplementary feeding; synthesis; threonine

CAS Registry Numbers: 72-19-5

authorsearch1.txt

Organism Descriptors: pigs

Broader Terms: Sus scrofa; Sus; Suidae; Suiformes; Artiodactyla; mammals; vertebrates; Chordata; animals; ungulates

CABICodes: Animal Nutrition (Physiology) (LL510)

36/8/52 (Item 10 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0007768357 CAB Accession Number: 19990404478

Amino acid utilisation by the mammary gland: whole blood versus plasma free amino acid pools.

Publication Year: 1999

Descriptors: mammary glands; cows; dairy cows; erythrocytes; blood; milk; milk protein; pastures; protein synthesis; synthesis; threonine; tyrosine; uptake; amino acids; utilization; milk synthesis

CAS Registry Numbers: 72-19-5; 60-18-4

Organism Descriptors: cattle

Broader Terms: Bos; Bovidae; ruminants; Artiodactyla; mammals; vertebrates;

Chordata; animals; ungulates

CABICodes: Animal Physiology and Biochemistry (Excluding Nutrition) (LL600); Animal Nutrition (General) (LL500)

36/8/53 (Item 11 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0007627268 CAB Accession Number: 19981614751

Molecular characterization of a protein kinase gene in Chinese cabbage (Brassica campestris subsp. napus var. pekinensis).

Publication Year: 1997

Descriptors: Chinese cabbages; protein kinase; nucleotide sequences; gene expression; open reading frames; amino acid sequences; polypeptides; roots

CAS Registry Numbers: 9026-43-1

Organism Descriptors: Brassica pekinensis; Brassica

Broader Terms: Brassica; Brassicaceae; Capparidales; dicotyledons; angiosperms; Spermatophyta; plants

CABICodes: Plant Breeding and Genetics (FF020); Biotechnology (General), (Revised June 2002) (ww000)

36/8/54 (Item 12 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0004576965 CAB Accession Number: 19780207543

Composition of pollen in hives.

Publication Year: 1974

Descriptors: pollen; composition; amino acids; metals; sugars

Identifiers: stored by bees

CABICodes: Apiculture (LL010)

36/8/55 (Item 1 from file: 98) Links

General Sci Abs

(c) 2006 The HW Wilson Co. All rights reserved.

02784988 H.w. Wilson Record Number: BGSA94034988

A requirement of hydrophobic and basic amino acid residues for substrate recognition

by Ca²⁺/calmodulin-dependent protein.

Descriptors:

Protein kinases; Enzyme specificity; Calmodulin
July 5 1994 (19940705)

36/8/56 (Item 1 from file: 103) Links

Energy SciTec

(c) 2006 Contains copyrighted material. All rights reserved.

03760740 EDB-95-004508

Title: The complete sequence and promoter activity of the human A-raf-1 gene (ARAF1)

Publication Date: 1 Mar 1994

Major Descriptors: *HUMAN CHROMOSOME 7 -- GENETIC MAPPING; *HUMAN X CHROMOSOME -- GENETIC MAPPING; *ONCOGENES -- DNA SEQUENCING

Descriptors: PHOSPHOTRANSFERASES

Broader Terms: CHROMOSOMES; ENZYMES; GENES; HETEROCHROMOSOMES; HUMAN CHROMOSOMES; MAPPING; ORGANIC COMPOUNDS; PHOSPHORUS-GROUP TRANSFERASES; PROTEINS; STRUCTURAL CHEMICAL ANALYSIS; TRANSFERASES; X CHROMOSOME

Subject Categories: 550400* -- Genetics

36/8/57 (Item 1 from file: 143) Links

Biol. & Agric. Index

(c) 2006 The HW Wilson Co. All rights reserved.

1694722 H.W. Wilson Record Number: BBAI03160345

Reciprocal Modulation of Toll-like Receptor-4 Signaling Pathways Involving MyD88 and Phosphatidylinositol 3-Kinase/AKT by Saturated and Polyunsaturated Fatty Acids

Descriptors: Toll-like receptors; Adaptor proteins; Phosphatidylinositol kinase; Serine- threonine kinase; Fatty acids--Biological effects
20030926

36/8/58 (Item 2 from file: 143) Links

Biol. & Agric. Index

(c) 2006 The HW Wilson Co. All rights reserved.

1676708 H.W. Wilson Record Number: BBAI03149546

Phosphorylation of Threonine 10 on CKBBP1/SAG/ROC2/Rbx2 by Protein Kinase CKII Promotes the Degradation of IkBa and p27Kip1

Descriptors: Phosphorylation; Serine-threonine kinase; Proteins in the body; Ikappa B
20030801

36/8/59 (Item 3 from file: 143) Links

Biol. & Agric. Index

(c) 2006 The HW Wilson Co. All rights reserved.

1061176 H.W. Wilson Record Number: BBAI97036107

A Drosophila homolog of the Rac- and Cdc42-activated serine/ threonine kinase PAK is a potential focal adhesion and focal complex protein that colocalizes with dynamic actin structures

Descriptors: Serine protein kinases; Actin, Non-muscle; GTP phosphohydrolase
19960500

36/8/60 (Item 1 from file: 162) Links

Global Health

(c) 2006 CAB International. All rights reserved.

0005075867 CAB Accession Number: 20053130772

Aurora- A/STK15 T + 91A is a general low penetrance cancer susceptibility gene: a meta-analysis of multiple cancer types.

Publication Year: 2005

Descriptors: breast; breast cancer; colon; genes; genotypes; heterozygotes; homozygotes; human diseases; kinases; lung cancer; lungs; men; molecular genetics; neoplasms; oesophagus; prostate; risk assessment; risk factors; skin; women
Identifiers: colon cancer; meta-analysis; oesophageal cancer; prostate cancer; serine/ threonine kinase; skin cancer

Organism Descriptors: man

Broader Terms: Homo; Hominidae; Primates; mammals; vertebrates; Chordata; animals

CABICodes: Human Genetics and Molecular Medicine, (New June 2002) (VV080);

Non-communicable Human Diseases and Injuries (VV600); Molecular Biology and Molecular Genetics, (Discontinued March 2000, Reinstated and Revised June 2002) (ZZ360)

36/8/61 (Item 1 from file: 305) Links

405658

Effect of selenium fertilizer on free amino acid composition of broccoli (*Brassica oleracea* Cv. Majestic) determined by gas chromatography with flame ionization and mass selective detection.

PD- 16 Nov 2005 ; 20051116 |

36/8/62 (Item 2 from file: 305) Links

405657

Free amino acid and cysteine sulfoxide composition of 11 garlic (*Allium sativum* L.) cultivars by gas chromatography with flame ionization and mass selective detection.

PD- 16 Nov 2005 ; 20051116 |

36/8/63 (Item 3 from file: 305) Links

394849

Mass spectrometric analysis of affinity-captured proteins on a dendrimer-based immunosensing surface: investigation of on-chip proteolytic digestion.

PD- 15 Feb 2005 ; 20050215 |

36/8/64 (Item 4 from file: 305) Links

384987

Separation of racemic 2,4-dinitrophenylamino-acids on zirconia-immobilized quinine carbamate in reversed-phase liquid chromatography.

PD- Aug 2004 ; 20040800 |

36/8/65 (Item 5 from file: 305) Links

343185

Reversal of enantiomeric elution order on macrocyclic glycopeptide chiral stationary phases.

PD- Oct 2001 ; 20011000 |

36/8/66 (Item 1 from file: 393) Links

Title: Characterization of Carbohydrate-Peptide Linkage of Acidic Heteroglycopeptide with Immuno-Stimulating Activity from Mycelium of *Phellinus linteus*
Pub. Year: 1996

>>>W: "FREE" is not a valid format name in file(s): 399

? t s38/free/1-16

>>>W: "FREE" is not a valid format name in file(s): 399

38/8/1 (Item 1 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002733660 IP Accession No: 6174522

Phosphorylation at Thr-290 regulates Tpl2 binding to NF- Kappa B1/p105 and Tpl2 activation and degradation by lipopolysaccharide

Publication Date: 2005

Descriptors: Phosphorylation; Lipopolysaccharides; proteasomes; Translation; Protein kinase; Inflammation; death receptors; Macrophages; Cell activation; Immunity
Subj Catg: 06604, Inflammation

38/8/2 (Item 2 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002710189 IP Accession No: 6274931

Tpl2 (Tumor Progression Locus 2) Phosphorylation at Thr super(290) Is Induced by Lipopolysaccharide via an I Kappa -B Kinase- beta -dependent Pathway and Is Required for Tpl2 Activation by External Signals

Publication Date: 2005

Descriptors: Phosphorylation; Lipopolysaccharides; Macrophages; Cell activation; Tumor necrosis factor- α ; Extracellular signal-regulated kinase; Protein kinase; death receptors; Toll-like receptors; Proto-oncogenes
Subj Catg: 07470, Cytogenetics & general

38/8/3 (Item 3 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002652563 IP Accession No: 6170695

A Single Nucleotide Polymorphism on the Promoter of eotaxin1 Associates with Its mRNA Expression and Asthma Phenotypes

Publication Date: 2005

Descriptors: Single-nucleotide polymorphism; Asthma; methacholine; Promoters; Immunoglobulin E; Tumor necrosis factor- α ; Gene polymorphism; Threonine; Inflammation; Alanine; Peripheral blood
Subj Catg: 06846, Clinical

38/8/4 (Item 4 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002641135 IP Accession No: 6090781

Proteomic response analysis of a threonine-overproducing mutant of *Escherichia coli*
Page 42

Publication Date: 2004

Descriptors: Threonine; Malate dehydrogenase; Citrate (si)-synthase; oxaloacetic acid; Aspartate ammonia-lyase; Aspartic acid; L- Threonine 3-dehydrogenase; Cystathionine beta -lyase; Escherichia coli

Identifiers: homoserine

Subj Catg: 07320, Bacterial genetics; 02727, Amino acids, peptides and proteins

38/8/5 (Item 5 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002381603 IP Accession No: 5472800

The roles of ERK1/2 and p38 MAP kinases in the preventive mechanisms of mushroom *Phellinus linteus* against the inhibition of gap junctional intercellular communication by hydrogen peroxide

Publication Date: 2002

Descriptors: Gap junctions; Hydrogen peroxide; ERK2 protein; ERK1 protein; MAPK protein; p38 protein; *Phellinus linteus*

Subj Catg: 26170, other oncogenes & GF's with serine-threonine kinase activity

38/8/6 (Item 6 from file: 24) Links

CSA Life Sciences Abstracts

(c) 2006 CSA. All rights reserved.

0002376564 IP Accession No: 5457836

Induction of COX-2 by LPS in macrophages is regulated by Tpl2-dependent CREB activation signals

Publication Date: 2002

Descriptors: Lipopolysaccharides; Macrophages; Cytokines; Cyclic AMP response element-binding protein; Tumor necrosis factor- alpha ; Interleukin 1; Protein-tyrosine kinase; Prostaglandin E2; Cyclooxygenase; Tpl2 protein; Cot protein; ERK protein; Endotoxin shock; Inflammation; Protein kinase; COX-2 protein; CREB protein

Identifiers: mice

Subj Catg: 07240, Immunogenetics; 06764, Function; 07397, Rodentia (mice)

38/8/7 (Item 1 from file: 50) Links

CAB Abstracts

(c) 2006 CAB International. All rights reserved.

0008302827 CAB Accession Number: 20023154899

Calcineurin, a calcium/calmodulin-dependent protein phosphatase, is involved in movement, fertility, egg laying, and growth in *Caenorhabditis elegans* .

Publication Year: 2002

Descriptors: enzymes; fertility; free living nematodes; gene expression; genes; growth; movement; mutants; mutations; pleiotropy; signal transduction; spermatheca; spermatozoa; vulva

Identifiers: serine/threonine specific protein phosphatase

Organism Descriptors: *Caenorhabditis elegans*

Broader Terms: *Caenorhabditis*; Rhabditidae; Nematoda; invertebrates; animals

CABICodes: Soil Biology (JJ100); Reproduction, Development and Life Cycle (Wild Animals), (New March 2000) (YY200); Genetics and Molecular Genetics (Wild Animals), (New March 2000) (YY300); Physiology and Biochemistry (Wild Animals), (New March 2000) (YY400)

authorsearch1.txt

38/8/8 (Item 1 from file: 143) Links

Biol. & Agric. Index

(c) 2006 The HW Wilson Co. All rights reserved.

1866763 H.W. Wilson Record Number: BBAl05137990

Tp12/Cot Signals Activate ERK, JNK, and NF-kB in a Cell-type and Stimulus-specific Manner

Descriptors: Serine-threonine kinase; Mitogen-activated protein kinase-- Regulation; Jun N-terminal kinase--Regulation; NF-Kappa B
20050624

38/8/9 (Item 2 from file: 143) Links

Biol. & Agric. Index

(c) 2006 The HW Wilson Co. All rights reserved.

1856876 H.W. Wilson Record Number: BBAl05132495

Tp12 (Tumor Progression Locus 2) Phosphorylation at Thr290 Is Induced by Lipopolysaccharide via an Ik-B Kinase-b-dependent Pathway and Is Required for Tp12 Activation by External Signals

Descriptors: Serine-threonine kinase; Phosphorylation; Lipopolysaccharides
20050527

38/8/10 (Item 3 from file: 143) Links

Biol. & Agric. Index

(c) 2006 The HW Wilson Co. All rights reserved.

1845557 H.W. Wilson Record Number: BBAl05115399

Phosphorylation at Thr-290 regulates Tp12 binding to NF-kB1/p105 and Tp12 activation and degradation by lipopolysaccharide

Descriptors: Serine-threonine kinase; Phosphorylation; Lipopolysaccharides; NF-Kappa B
20050215